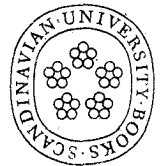


*Christian S. Stang*

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# SLAVONIC ACCENTUATION

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## PREFACE

In the following pages I have attempted to reconstruct the proto-Slavonic system of accentuation, i.e., I have tried to find a *point de départ* capable of explaining as far as possible the systems of accentuation which are to be found in the separate Slavonic languages.

The method I have used is the historical-comparative method. My approach is eclectic. Of the forms which may be old, I regard as proto-Slavonic those which together appear to provide the best basis of explanation for the largest possible number of forms in the separate languages. This explains why, for instance, in one case I may consider a Štokavian form as being the oldest, while in another case I may select a Čakavian, and in a third a Russian, etc., without any other criterion but the fact that the particular form selected is best capable of explaining other forms. The practical value of this method depends on how much the picture thus created is capable of explaining. This method differs in no way from the one that has always been used in comparative linguistics.

It is clear that material which is unknown today may change many of the results at which I arrive. In the first place, in the great mass of older accentuated texts which have not yet been exhaustively dealt with — not least in the sphere of Bulgarian — there is certainly a great deal of material which is of importance to the historical study of accentology. Furthermore, the living dialects have not yet been sufficiently investigated. There is still a great deal of special study to be undertaken in each of the Slavonic languages, before the uncertain factors which are due to our lack of knowledge have been more or less eliminated.

Moreover, the very problems which are here dealt with are so involved that for many years to come a great many of them will still be the subject of valid dispute. What I have here attempted to do is merely to pursue these discussions one step further.

## SLAVONIC ACCENT

### I. INTRODUCTION

Proto-Slavonic inherited from Indo-European at least two phonological prosodical elements: free stress and free quantity. In addition proto-Slavonic exhibited a phonological difference of intonation. To what extent this was inherited from Indo-European I shall not try to show in this work. The main point, as far as we are concerned, is that in this respect Slavonic agrees in its main features with Baltic.

F. de Saussure has demonstrated the connection between Baltic intonations (outside the final syllable) and Indo-European quantity (MSL 8, p. 425 ff = Recueil de publications scientifiques, p. 490 ff). He shows that in principle a long Indo-European monophthong becomes acute, as do also *ir, il, im, in* (*ur, ul, um, un*) < *ī, ĭ, m̃, ñ*, while normal diphthongs and the reflexes of *r, l, m, n*, become circumflex. As Kuryłowicz rightly pointed out many years later, basing himself on the assumptions of our own age, a difference in intonation, accompanying quantity, is not phonological. But a phonological difference in intonation arose the moment *ir, il, im, in* and *ai, au, ei, an, er*, etc., could be intoned differently, as a result of *ī, ĭ, m̃, ñ, āi, āu*, etc., being shortened and *a* disappearing in an internal syllable. In addition metatonies arose, which gave *ō, ē, ŷ, Ź*, respectively *ái, áu, éi, án*, etc., under special conditions.

It has long been realised that in Slavonic, too, the same principles apply to the distribution of intonations outside the final syllable. A perusal of Trautmann's Baltisch-slavisches Wörterbuch shows that this is the case.

Below are listed examples of Slavonic and Baltic words, wholly or approximately formed in the same way, which show intonation.

#### 1) Identical formations.

Latv.	<i>aũka</i>	— S.-Cr. <i>ũka</i> ?
Lith.	<i>bóba</i>	— » <i>bāba</i>
»	<i>barnis</i> ( <i>bařni</i> )	Slov. <i>brân</i> (gen. <i>branĭ</i> )
»	<i>burnà</i> ( <i>bũrna</i> )	— Bulg. <i>бърна</i>

Lith.	<i>būti</i>	— S.-Cr. <i>bīti</i>
Latv.	<i>dārgs</i>	— » <i>drāg</i>
Lith.	<i>draugas</i>	— » <i>drūg</i>
»	<i>dūmai</i>	— » <i>dīm</i>
»	<i>ēsti</i>	— » <i>jēsti</i>
»	<i>gařdas</i>	— » <i>grād</i>
Latv.	<i>gnīda</i> , (lit. <i>glīnda</i> )	— » <i>gnjīda?</i>
Lith.	<i>grīdis</i> ( <i>grīndī</i> )	— Slov. <i>grēd</i> (gen. <i>gredī</i> )
Latv.	<i>grīva</i> (mouth of a river)	— S.-Cr. <i>grīva</i> (mane), cf. Skt. <i>grīvā</i> (back of the neck)
Lith.	<i>grūodas</i>	— » <i>grād?</i>
Latv.	<i>iēva</i> (Lith. <i>ievā</i> [ <i>iēvq</i> ])	— » <i>īva</i>
Lith.	<i>kārka</i>	— Slov. <i>krāka</i>
»	<i>kiņštas</i>	— S.-Cr. <i>čest</i>
»	<i>jūosiu</i>	— R. <i>но́ясѣ</i>
Pruss.	<i>kērschan</i>	— R. <i>і́єpez</i>
Lith.	<i>kietas</i>	— čit?
»	<i>kirmis</i> ( <i>kiřmī</i> )	— Slov. <i>črm</i>
»	<i>kreivas</i>	— S.-Cr. <i>kriv</i>
»	<i>krēslas</i>	— Slovak. <i>krieslo</i> , R. <i>крѣсло</i> , pl.-a.
»	<i>kraņtas</i>	— S.-Cr. <i>krūt</i>
»	<i>kūla</i>	— » <i>kīla?</i>
»	<i>lōju</i>	— » <i>lājem</i>
»	<i>lōva</i>	— R. <i>л́ова</i>
Latv.	<i>ļaudis</i> , but lit. <i>liāudis</i>	— S.-Cr. <i>liūdi</i>
Lith.	<i>liepa</i>	— » <i>līpa</i>
»	<i>laņkas</i>	— » <i>lūk</i>
»	<i>lankā</i>	— Čak. <i>lūkā</i> (?)
»	<i>lōpa</i>	— R. <i>л́ana</i>
»	<i>maišas</i>	— S.-Cr. <i>mījeh</i>
»	<i>mótē</i>	— » <i>māti</i>
»	<i>miēgas</i>	— » <i>mīg</i>
»	<i>mielas</i>	— » <i>mīo</i> (F. <i>mīla</i> )
»	<i>mīlžti</i>	— » <i>mūsti</i>
»	<i>nýtis</i>	— » <i>nīt</i>
»	<i>palvas</i>	— » <i>plāv</i> but Slov. <i>plāv</i>
»	<i>pielā</i> ( <i>piēlq</i> )	— » <i>pīla</i> ( <i>pīlu</i> )
»	<i>pēlnas</i>	— » <i>plījen</i> — but R. <i>полон</i>
»	<i>pīlnas</i>	— » <i>pūn</i>
»	<i>pīřštas</i>	— » Slov. <i>přst</i> , but S.-Cr. <i>přst</i>
Žem.	<i>pīřšys</i>	— S.-Cr. <i>přsi</i>

Latv.	<i>puōšms</i>	— S.-Cr. <i>pāsmo</i>
Lith.	<i>rankā</i> ( <i>raņka</i> )	— » <i>rūka</i> ( <i>rūku</i> )
»	<i>raūdas</i>	— » <i>rūd</i>
Latv.	<i>rūobs</i>	— » <i>rūb?</i>
Lith.	<i>rēžiū</i>	— Slov. <i>rěžem</i> , <i>rězati</i>
»	<i>saūsas</i>	— S.-Cr. <i>sūh</i>
»	<i>siela</i>	— » <i>sīla?</i>
»	<i>sēmens</i>	— » <i>sjēme</i>
»	<i>sietas</i>	— » <i>sīto</i>
»	<i>sēsti</i>	— » <i>sjēsti</i>
Latv.	<i>sirps</i>	— » <i>sřp</i>
»	<i>sliēnas</i>	— » <i>slīne</i>
Lith.	<i>sniēgas</i>	— » <i>snījeg</i>
»	<i>spēju</i> , <i>spėti</i>	— Slov. <i>spjějem</i> , <i>spěti</i>
»	<i>stóti</i>	— S.-Cr. <i>stāti</i>
»	<i>stóras</i>	— » <i>stār</i>
»	<i>sūras</i> , <i>sūris</i>	— » <i>sřr</i>
»	<i>šiēnas</i>	— » <i>sījeno</i>
»	<i>šalnā</i> ( <i>šalņa</i> )	— » <i>slāna</i> ( <i>slānu</i> )
»	<i>šárka</i>	— » <i>sřrka</i>
»	<i>šelmuō</i> ( <i>šēlmenī</i> )	— » <i>šljēme</i>
»	<i>šeřkšnas</i>	— Slov. <i>srěn</i>
»	<i>šývas</i>	— S.-Cr. <i>sřv</i>
»	<i>šveņtas</i>	— » <i>svēt</i>
»	<i>táukas</i>	— » <i>tūk</i>
»	<i>taūras</i>	— Slov. <i>tūr</i>
Latv.	<i>tēls</i>	— S.-Cr. <i>tějelo</i>
Lith.	<i>talkā</i> ( <i>talķa</i> )	— Ukr. <i>мо́лока</i> ( <i>мо́локу</i> ) ?
»	<i>ūdra</i>	— S.-Cr. <i>vřdra</i>
»	<i>vařgas</i>	— » <i>vrāg</i>
»	<i>vařnas</i>	— » <i>vrān</i>
»	<i>vārna</i>	— » <i>vrāna</i>
»	<i>vařtas</i>	— » <i>vrāta</i> (< pl. <i>*vrātā</i> , which presupposes sg. <i>*vrāto</i> )
»	<i>vīllkas</i>	— » <i>vūk</i>
»	<i>vīlna</i>	— » <i>vūna</i>
»	<i>žqšis</i> ( <i>žqšī</i> )	— Slov. <i>gōs</i> (gen. <i>gosi</i> )
»	<i>žárdas</i>	— R. <i>зорóд</i>
»	<i>žiemā</i> ( <i>žięmā</i> )	— S.-Cr. <i>zīma</i> ( <i>zīmu</i> )
»	<i>žam̃bas</i>	— » <i>zūb</i>
»	<i>židūnos</i> (jaw)	— Bulg. <i>жyна</i> (lip)



2) Words which agree except in so far as they belong to different stem classes.

Lith.	<i>ántis</i>	— S.-Cr. <i>ūtva</i> (Ch.-Sl. <i>oty</i> )
»	<i>ausis</i> ( <i>aūsī</i> )	— Slov. <i>uhō</i>
»	<i>béržas</i>	— S.-Cr. <i>brěza</i>
»	<i>dervà</i> ( <i>deřva</i> )	— » <i>drějevo</i>
Latv.	<i>gūste</i>	— » <i>gřst</i> ?
Lith.	<i>kárvė</i>	— » <i>kràva</i>
»	<i>kūrpė</i>	— » <i>křplje</i> , Slov. <i>křplja</i>
Latv.	<i>miesa</i>	— » <i>měso</i>
Lith.	<i>pařsas</i>	— » <i>prāse</i>
»	<i>pántis</i>	— » <i>pūto</i>
»	<i>súodžiai</i>	— Slov. <i>sāja</i> , Č. <i>sáze</i> , R. <i>сáжca</i>
Latv.	<i>salms, salmi</i>	— S.-Cr. <i>slāma</i>
Lith.	<i>šlovė</i> (besides <i>šlovė</i> )	— » <i>slāva</i>
»	<i>vėtra</i>	— » <i>vjėtar</i>
»	<i>virvė</i> ( <i>viřvė</i> )	— Slov. <i>vřv</i> (gen. <i>vřvī</i> )
»	<i>žirnis</i>	— S.-Cr. <i>zřno</i>
»	<i>žvaigždė</i> ( <i>žvaigždė</i> )	— » <i>zvijězda</i> , r. <i>звездá</i> (pl. <i>звезды</i> )
»	<i>žėntas</i>	— » <i>zět</i>

3) Words which agree except for certain phonetic variations that are not always clear.

Lith.	<i>barzdà</i> ( <i>barzda</i> )	— S.-Cr. <i>bráda</i> ( <i>brādu</i> )
»	<i>brólis</i> (dimin.)	— » <i>brāt</i>
»	<i>dėlna</i>	— » <i>dlān</i>
»	<i>ilgas</i>	— » <i>dūg</i>
»	<i>gėl̃tas</i>	— » <i>žūt</i>
»	<i>gýsla</i>	— » <i>žīla</i>
»	<i>kriáušė</i>	— R. <i>кpýшca</i> , Bulg. <i>кpýшca</i>
»	<i>lūnkas</i>	— S.-Cr. <i>liko</i>
»	<i>lūšis</i>	— » <i>rīs</i>
»	<i>spáinė</i>	— » <i>pjēna</i>
Latv.	<i>rieksts</i> , lit. <i>riešutas</i>	— » <i>òrah</i> (Dalm. <i>orih</i> )
Lith.	<i>sprėsti</i>	— » <i>prėsti</i>
»	<i>vókas</i>	— Slov. <i>věko</i>
»	<i>žėltas</i> , Latv. <i>zēlts</i>	— S.-Cr. <i>zlāto</i>
»	<i>zvīgždai</i>	— » <i>zvřst</i>

4) Words which have the same root, but a different derivative suffix.

Lith.	<i>áiškus</i>	— S.-Cr. <i>jāsan</i>
»	<i>álkti</i>	— Č. <i>lakomý</i> , R. <i>лакомый</i>

Lith.	<i>árklas</i>	— S.-Cr. <i>rālo</i>
»	<i>prėskas</i>	— Slov. <i>prěsen</i>

Next I come to examples of Slavonic and Baltic words which are similarly formed or closely related, but differ in intonation.

#### 1. Acute in Baltic, circumflex in Slavonic.

Lith.	<i>gývas</i>	— S.-Cr. <i>živ</i>
»	<i>galvà</i> ( <i>gálva</i> ), Latv. <i>galva</i>	— » <i>gláva</i> ( <i>glāvu</i> )
Latv.	<i>dzilna</i>	— Čak. <i>žūnā</i>
Lith.	<i>klėtis</i>	— S.-Cr. <i>kljjet</i>
»	<i>kūjis</i>	— Slov. <i>kij</i>
»	<i>lėnas</i>	— S.-Cr. <i>lijen</i>
»	<i>nuogas</i> , lett. <i>nuōgs</i>	— » <i>nāg</i>
»	<i>pėntis</i>	— » <i>pėta</i> ( <i>pėtu</i> )
»	<i>ruožas</i>	— » <i>rāz</i>
»	<i>rėžas</i>	— Slov. <i>rěz</i>
»	<i>sūnūs</i> ( <i>sūnų</i> )	— S.-Cr. <i>sīn</i>
»	<i>váltis</i>	— Slov. <i>vlāt</i> (g. <i>vlatī</i> )
»	<i>vėidas</i>	— S.-Cr. <i>vīd</i>
»	<i>jáunas</i>	— Slov. <i>jūn</i>

#### 2. Circumflex in Baltic, acute in Slavonic

Lith.	<i>pūras</i>	— S.-Cr. <i>přr</i>
»	<i>slankà</i> ( <i>slaňka</i> )	— » <i>slūka</i> , Russ. <i>слýка</i>
»	<i>plaučiai</i>	— Slov. <i>pljuča</i> , Old Č. <i>pljuce</i>
»	<i>kařtas</i>	— » <i>krāt</i>

#### 3. Acute in Baltic, neo-acute in Slavonic

Lith.	<i>ėdu</i> , Latv. <i>ēmu</i>	— Čak. <i>jén</i>
»	<i>dúodu</i> , Latv. <i>dūodu</i> , <i>dūomu</i>	— Čak. <i>dán</i>

The instances of type 2 are sporadic deviations, which must always be expected where accent is concerned, even between dialects which are closely related. Examples of type 3 belong to a definite flexional type, and can be explained in connection with it (Chapter VII A 3).

The examples of type 1, however, are sufficiently numerous to be significant.

From clear-cut examples such as Lith. *galvà*, accusative *gálva*; *sūnūs*, accusative *sūnų*; *žvėris*, accusative *žvėrī*, I conclude that we are here dealing with the mobile type with an acute root syllable. Cf. furthermore *gývas*, F.-à (*Daukša*), *jáunas*, -à (*Dkš.*), *nuogas* -à (*Dkš.*), *ruožas* (pl. *ai*), *vėidas* (pl. *-ai*). Thus it appears that the mobile type with an acute root

syllable, which is lacking in Slavonic, has here joined the mobile type with a circumflex root syllable. Cf. Meillet, *Sbornik statej* .. Fortunatovu (1902) p. 123f.

I do not assume any phonetic change here, for the following reasons:

1. A phonetic transition *\*gólvo* > *\*golvo* (= Lith. *gálva*) is difficult to accept: I find no parallels. Nor are there any tangible grounds for assuming a transition from rising to falling intonation in the pretonic syllable. In Štokavian, where the originally pretonic syllables have been given an ictus, they are rising (*gláva*).

*A priori* it might be possible to imagine a retraction of ictus from a final stressed *o-b* to a preceding acute vowel, with a change of the acute to circumflex. Lithuanian *sūnūs* : *sūnų*, *žqsis* : *žqšų*, *geràsis* : *gērąši* suggests that in the mobile paradigm the nominative singular had final stress, the accusative singular stress on the first syllable. Slavonic *\*golvā* : *\*golvo*, etc., points in the same direction as far as this group of languages is concerned. One could assume hypothetically that nom. *\*nāgō*, *\*živō*, *\*zvērō*, *\*jūnō*, *\*sýnō* represent the accentuation of the nominative with retraction of the stress from *o*, *b* and change of the acute intonation into a circumflex. But if this were so, these forms would stand in contrast to *sūxō*, *gōsb*, etc., which of necessity represent the accentuation of the accusative. For by retraction from *-o, -b* to a vowel, which otherwise within the etymological group concerned shows a circumflex, or in principle should have a circumflex, we get in Slavonic neo-acute. (At this stage I shall not discuss whether this is really also the case where the etymological group concerned has an acute or where an acute is in principle expected.) Cf. Čak. *králj* < *\*korl'ò*, *brést* < *\*berstò*, etc. Furthermore *\*dēsēb* (Russian *décāmō*, Serbo-Croatian *dēsēt*) also suggests that the accusative form has replaced the nominative, as this form agrees with Lithuanian *dēšimtj*, whereas the form corresponding to *dēsimtis* would have been *\*desētō*.

I assume, therefore, that the circumflex in the root-stressed forms of *\*golvā*, *\*sýnō*, *\*živō*, *\*nāgō*, etc., is due to analogy: after the difference of intonation had disappeared in pretonic syllables, *\*zīmā* (Acc. *\*zīmq*), Loc. Sg. *\*gōsi* (Nom.-Acc. Sg. *\*gōsb*), F. *\*sūxā* (M. *\*sūxō*) no longer differed in intonation from *\*golvā* (*\*gólvo*) and *\*sýnū* (*\*sýnō*), *\*zvērī* (*\*zvērō*). The latter type then gave way to the former.

As a result of this process of analogy being carried out systematically, Slavonic lost its acute mobilia. Words with an acute root syllable are in Slavonic for that reason *eo ipso* immobile.

In this way it is possible to explain a series of mobile substantives with long circumflex vowel, cf. Serbo-Croatian *sād*, *dār*, *stān*, *kvās*, *pīr* ..

Kuryłowicz maintains in his writings on stress that the acute is due to a Balto-Slavonic retraction to a long vowel<sup>2</sup>. In his opinion, then, the circumflex is the original intonation of the long vowels which have preserved their ictus from I.-E. times<sup>3</sup>. The theory that in certain cases ictus has been retracted from medial syllables — and under certain circumstances also from final syllables — in Baltic and Slavonic, is an old one. De Saussure assumed a retraction from a stressed medial syllable in Baltic:

*\*duktě* = *duktě*  
*\*duktērin* > *dūkteri*  
*\*duktēri* > *dūkteri*  
*\*duktēres* > *dūkteres*

He states in a note: "Il est malheureusement difficile de dire le caractère exact qu'aurait cette loi, car il y a des obstacles à la transformer en loi phonétique pure et simple". (Recueil de publications, p. 533).

Kuryłowicz maintains that the acute has arisen as the result of two sound-laws, viz.:

- a. the stress is retracted from the penultimate syllable to the preceding syllable, which acquires an acute if it contains a long vowel or a long diphthong (e.g. *ēi*, *ēr* < Indo-European *ēi*, *ēr*, *eya*, *erā*);
- b. the stress is retracted from the final syllable to the preceding syllable, where this contains a long vowel or long diphthong (*Intonation et morphologie*, p. 7; *Accentuation*, p. 193). In *Accentuation*, p. 196, he considers the retraction of stress to be automatically continued to the first syllable in cases where the word contains more than three syllables. He assumes that formula b applies to Slavonic alone (Int. et morph., p. 65).

These sound-laws, according to the author, provide the basis on which the structural laws of Slavonic accent were formed. He says himself of these two laws: "On ne peut plus déterminer les conditions phonétiques exactes, dans lesquelles les deux premières lois agissaient," *Intonation et morphologie* p. 64 (cf. the reservation, quoted above, made by de Saussure).

With regard to the question of phonetic retraction from circumflex or short vowel in an internal syllable in Baltic, I believe Būga is right in his remark in TŽ II, p. 485 ff in his review of Torbiörnsson's "De litauiska akcentförskjutningarna och den litauiska verbal-akcenten", where

he criticises Torbiörnsson's theory of a retraction form an "accentually open" medial syllable: "Žodžio vidurinio atviro skiemens kirtis nešoka pirma greta stovinčian trumpan skiemenin. Tai rodo, kad ir šios lytys: *prakālas* "preikalas" .... (greta su lytimis *pātalai/pamatai*), *ratānas* "Kreis", Als., Slnt. (*rāgana*, r.a. *davanā* Ds.), *meletā* (kilm. *melētos*)/*skēpeta*/šepetā, -ōs .., *klebētas* (*lenkētas*, *velkētai*, *verpētas*, *kerepētas* Ds.)/*trējetas*, *vaikinas*, *pentinas*, *merginos* (g. sg.)/*ižg'* āuksinu arba sidābrinu skrinėlu Dk.../ *avinaī*, *katinai*, *nešimas* (*leidimas*, la. *laist*, *ėdimas*/la. *ėst*)/*sėjimas* (lat. *sēt*), *skýrimas* ... , *kūlimas* ... Taigi, vidurinių skiemenų kirtis lietuvių kalboje nepereina pirmąjį žodžio skiemenin. Kirtis nuo vidurinio skiemens balsio trumpumo arba ilgumo nepridera: *melētos* (gen. sg.)/*varýklos* (gen. sg.), *stebūklas*/ *pabūklas*." [The stress is not retracted from an internal open syllable to a preceding short syllable. The following forms prove this: *prakālas* "anvil" .. (besides the forms *pātalai/pamatai*), *ratānas* "circle", Als., Slnt. (*rāgana*, eastern High Lith. *davanā* Ds.), *meletā* (gen. *melētos*) ... Thus the stress is not retracted in Lithuanian from an internal syllable to the first syllable of the word. The stress is independent of the quantity of the internal syllable: *melētos* (gen. sg.)/*varýklos* (gen. sg.), *stebūklas*/ *pabūklas*.]

It is of course possible to maintain that the examples mentioned by Būga may be later than a possible Balto-Slavonic retraction. It is however improbable that all the types mentioned with appurtenant accentuation should be so late. Moreover many other words and types of formation of this kind are to be found. From Kurschat's grammar, p. 157ff, I have selected the following: *aviniñkas*, *dalýkas*, *degūtas*, *malūnas*, *sidābras*, *vainikas*, *jaunikis*, *manīškis*, *drabūžis*, *melāgis*, *gyvatā* (-ātos), *lydekā* (-ēkos). In addition may be cited diminutives in -ūkas -ūtė, etc. Some of the suffixes (-ykas, -ikas, -ūnas) are of «Balto-Slavonic» origin.

Kuryłowicz, Accentuation, p. 284 f., explains the types *ančiūkas*, *daininiñkas* .. as originating from -ukās, -inkās, but transferred to the type *pōnas* after the operation of de Saussure's law, the instrumental singular, nominative-accusative dual *ančiukū*, the accusative plural *ančiukūs*, being regarded as words with final stress according to this law. There is however nothing in Baltic to support the view that derivatives with stress on the final syllable should have suffered any other fate than that of other originally end-stressed words.

Holger Pedersen observes in this *Études lituaniennes*, p. 25, on retraction from inner circumflex or short vowels: «Il ne s'agit pas d'une loi qui exige le recul de l'accent de toute pénultième: il serait tout à fait impossible de prouver qu'une telle loi se soit jamais manifestée.»

Nevertheless, in nouns Pedersen assumes a regular retraction. He accepts a «recul d'un accent qui contrastait avec un autre accent (final)

dans le même paradigme, et qui à cause de ce contraste était exagéré et anticipé.» The principle here maintained by Pedersen is interesting enough, but I know of no parallels to support it.

Thus, I am not inclined to accept the theory of a retraction from an inner syllable in Baltic, a theory which even its leading supporters, de Saussure, Holger Pedersen, and Kuryłowicz, are unable to formulate without reservation.

Nor do I consider, on the grounds of Lithuanian *dūkteres* (Sanskrit *duhitārah*), that there is any necessity to assume retraction, as the mobile type, with skipping of internal syllables, is not, as Meillet, Bally, and others have shown, an unknown principle in Indo-European languages (Chapter IX).

As far as Slavonic is concerned, I subscribe to the view — a view that is fairly common — that an inner, stressed circumflex has surrendered its ictus to the vowel of the preceding syllable. But as the Baltic languages show no reluctance to this intonation in inner syllables, and since no convincing criteria exist to show that these languages previously exhibited any reluctance of this kind, and furthermore as it is not possible genetically to separate the Slavonic and Baltic intonations, this retraction cannot be the origin of Balto-Slavonic acute. Furthermore, I believe — as I shall subsequently try to prove — that the Slavonic retraction is late, and has given rise to neo-acute<sup>4</sup>.

With regard to retraction from short stressed vowels in an internal syllable, I can find no evidence to show that any retraction of this kind at all has taken place in Slavonic, apart from retraction from the semi-vowels (which gave rise to neo-acute) and certain special cases which will be dealt with later. Thus in conformity with sound-laws we find forms such as \**gotōv*, \**gotōva*, etc., cf. Russian *гомѡв*, -ѡва, -ѡво, Serbo-Croatian *gōtov*, *gōtova*, Slov. *gotōv*; Russian *гомѡsumъ*, Serbo-Croatian *gōtoviti*, Slov. *gotōviti*; the type Russ. *Иемѡс*, -ѡва, -ѡво, etc. It is not at all surprising in Slavonic that the ictus should be retracted from a circumflex inner syllable, but not from a short syllable, for in Slavonic inner stressed short vowels had a rising intonation, while the circumflex was falling (see Šachmatov in Vasiljev, Kamora p. VII). For this reason, in Russian dialects with two o- sounds, stressed o outside the first syllable belongs to the same type as neo-acute o in the first syllable: *гомѡв*, *гомѡва*, *гомѡво* in the same way as *воля*, as opposed to *род*, *рѡда*. Cf. Čak. *zakōn* (genitive *zakōna*), dative plural *krovōn* (nominative *krovī*), where the lengthened o before n in the final syllable acquires a rising intonation. (Belić, Glas 86, p. 4).

I cannot, therefore, accept Kuryłowicz's theory on the origin of Balt.-Slav. intonations. On the other hand there are no general grounds,

at any rate outside final syllables, for assuming that they go back to Indo-European. Accepting de Saussure's doctrine that the acute continues the cadence of long vowels and long diphthongs, while the circumflex continues the cadence of normal diphthongs, we must assume that at a certain point in the phonetic development of the language they became phonological<sup>5</sup>.

As far as intonation in the final syllable is concerned, Kuryłowicz maintains that Lithuanian intonation has no connection with the Greek: whilst difference of intonation in Greek is only phonologically relevant in the final syllable, phonological difference of intonation in Lithuanian only exists outside the final syllable. What we find in the auslaut syllable is that a long vowel, when absolutely final, is shortened, while a long vowel in an originally covered auslaut remains long (when stressed it becomes circumflex). As a result of this shortening ictus is transferred to the vowel concerned from the circumflex or short stressed vowel in the previous syllable. This is Kuryłowicz's reformulation of de Saussure's law. He maintains that de Saussure's law and Leskien's law regarding the shortening of acutes in final syllables are really one and the same, and that they merely express two different sides of the same process. According to Kuryłowicz there is no reason for de Saussure's attributing any particular role to intonation of the end syllable in the process of events. Kuryłowicz is on principle absolutely against assuming any difference of intonation in unstressed syllables.

The reason why, despite the attractions it holds out, I am unable to subscribe to this theory, is that there are too many single factors which, in my opinion, cannot be satisfactorily explained in this way. I am in spite of all inclined to subscribe to the idea of a connection between the Baltic and the Greek intonations, and possibly too between these intonations and the Vedic reading of certain long vowels as two syllables. But I do not thereby maintain that the Indo-European basis for the phenomena is necessarily a matter of intonation. Other phonetic phenomena may have been responsible, e.g. hiatus or combinations with intervocalic schwa (type  $a^*Ha^*$ ).

However, I do not intend to deal with this question here, not only because the material available, apart from Lithuanian and Greek, is exceptionally meagre and difficult to apply but also — and principally — because this question in my opinion only affects Slavonic indirectly.

And here, finally, I see eye to eye with Kuryłowicz, for, in my opinion, it cannot be stated that Slavonic shows any after-effects of the old intonation difference in final syllables. The long vowels are in principle shortened in the final syllable, and whether these were originally circumflex or acute is of no significance in this case.

According to de Saussure's law transference of ictus would indicate the difference of intonation in the final syllable. But, as we know, de Saussure himself has never maintained that this law applies in Slavonic. However, more especially since Meillet's articles on this subject<sup>6</sup>, most scholars now agree that de Saussure's law has also operated in Slavonic.

Kuryłowicz disassociates himself from this view, and, in my opinion, is quite right in so doing. It can be shown that the cases where de Saussure's law is supposed to have operated either can or must be explained in another way.

Though it might be sufficient in this instance to refer to Kuryłowicz's remarks in Roczn. Slaw. X, p. 75 ff, with which I am in the main in agreement, nevertheless I consider it appropriate to go through the cases here too, and to make some observations on them. I shall deal with the cases mentioned by Lehr-Splawiński, Ze studjów nad akcentem słowiańskim p. 2 ff, and van Wijk, Intonationssysteme, p. 29 ff.

1. Loc. sing. in  $-ù, -ì$ , Russian *на дому́, на мели́*. This stress, however, is also to be found in polysyllables: *на остро́ву, на площа́ди*. Thus it would be necessary to accept, in common with H. Pedersen, KZ 38, pp. 307 and 332, that de Saussure's law has also operated between the first and last syllable, skipping medial syllables. This, however, could not apply to Lithuanian, cf. *āsilas*, instr. sing., nom-acc. dual *āsiliu*, acc. pl. *āsilus* in the face of *pōnas*: *ponù, ponùs*. Thus in Slavonic we should have to deal with an extended form of de Saussure's law. I consider it far more reasonable to assume that the Slavonic final stress in the cases we are here dealing with arises from a mobile paradigm similar to what we find in Lithuanian. This type of accentuation demands stress on the last syllable in the locative singular, cf. *sūnūs, sūnu: sūnujè* in the same way as *Lietuvà: Lietuvà: Lietuvojè*, cf. also Russian *скоро́родá: скоро́роду: скоро́родé*.

2. Infinitive, Russian *нестí: насть*. These forms must be regarded as locative singulars of *i*-stems. Russian *нестí*, Serbo-Croatian *plèsti* may then be directly compared with Russian *на мели́, на перí*, Serbo-Croatian loc. sing. *stvári, nòci*. Root-stressed infinitive stems such as Russ. *насть*, Serbo-Croatian *pàsti* belong to the immobile *i*-stems (cf. Russian loc. *нóму* from *нумь*, Serbo-Croatian *mèdi* from *mèd*).

At first sight it may appear surprising that the infinitives should belong to two different types of accentuation, considering that their formative element and function are precisely the same. But just as the acute mobilia Sinlavonic became circumflex mobilia, so the original circum-

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flex immobilia seem to have become circumflex mobilia (Slavonic \**ropkà*, gen. \**ropkŷ* besides Lith. *rankà*: *raĩkos*). Cf. p. 60. Probably \**pàsti* represents the basic type, while \**nesti* is due to secondary transference of \**nestb* to the mobile type (cf. loc. \**ropcè* — Lith. *raĩkoje*). Cf. also Daukša *mĩrtis* (death).

3. Nom. Sg. Russian *голова* (: acc. *голове*), Serbo-Croatian *gláva* (: *glávu*). This contrast does not consist in an interchange between the last and penultimate syllables, but in an exchange between the first and the last, with skipping of any medial syllables: Russian *сковородá*: *сковоро́ды*. Thus final stress in the nominative singular is due to the accentuation of the mobile types, cf. Lith. *žmonà*: *žmonàq*, *Lietuvà*: *Lietuvq*.

4. Nom. acc. pl. N. Russian (*но́ле*:) *поля́*, Serbo-Croatian (*бр̂до*:) *бр̂да*, are in the same class as 3, cf. *озеро*: *озерá* (*озѣра*), *зеркало*: *зеркалá*, which shows that we are here dealing with a «morphological» stress. The neuter-collective and the feminine *ā*-formation both demand final stress within the mobile paradigms.

5. Neuter words in *-et-*: Serbo-Croat. *jǎgñe* (gen. *jǎgñeta*) beside *těle* (*těleta*). In Serbo-Croat., however, we find forms with short or circumflex stressed vowels in the first syllables: *prāse*, *ždrījebe*, *kōzle* beside *jūne*, *těle*, *zvíjere*, etc. This does not suggest an original distribution according to de Saussure's law. Slovene also has *prasē*, *prasēta* (< \**prāse*, \**prāsēta*) beside *prasē-prasēta* (see Chapter IV).

6. Nom. sing. neuter in *-e* (gen. *-ene*). Serbo-Croat. *vrijēme* (gen. *vrēmēna*) stands alone in Serbo-Croat. Otherwise we find *īme*, *plēme*, *rāme*, *sjēme*, *šljēme*, *tjēme*, *vīme*. But Čak. *vrīme* and the expression *něvrēme* (Štok.) point back to an older \**vrēme* (\**vrijēme*), see Belić, *Исцопуја* p. 56. In Slovene *strēme*, *plēme*, *vrēme* besides *sēme*, *tēme*, *slēme* are apparently in complete accord with de Saussure's law. But in the genitive we find *stremēna* besides *sēmēna*, etc. This suggests that in Slovene we are not dealing with a transference of ictus to acute *-e*, but with an old stress on the suffix *-e*, *-en-* (cf. Kuryłowicz, l.c. p. 63). We also find a relic of this type in Old Russian *племѧ*, gen. *племѧни* etc. (for *племѧ*: *племѧни*); Ukrainian *імѧ*: *імені*, pl. *іменѧ*, *імен* is perhaps a secondary mixture of two types.

7. Loc. sing. in *-ě/-i* of *ā-* and *iā-* stems: R. *ногѣ*, *сковородѣ* etc. Here, as in 1, 3, and 4, we are concerned with an interchange between the first and last syllable in the paradigm, with skipping of medial syllables, and the interchange can be explained here too on the grounds of the old mobility (cf. Lith. *Lietuvà*: *Lietuvojē*).

8. Nom. acc. dual. The Russian plural forms of the type *бѣрегѣ*: *бѣрегá*, (*лесѣ*:) *лесá*, (*зородѣ*:) *зородá*, etc., are still today frequently explained as old dual forms. At the same time they are adduced as evidence to show that de Saussure's law has operated (cf. Lith. *ponù*, *gerùo-ju*; Gr. *-ów*).

But I do not consider that this argument holds good, either for its first or its second part. In the first place the nom. acc. dual (MFN), in cases where we are undoubtedly dealing with old dual forms, does not seem to have the ictus thrown on to the end from a short or circumflex syllable. Cf. Russian *оба*, *обе* = Serbo-Croat. *oba*, *obje*, Slov. *obā*, *obē*; cf. also Russ. *оу* (Lith. *abū*, *abì*, *akì*). In Slovene, where dual is still in active use, we find from *mōž*, *gubā* the dual *možā*, *gubē*; cf. *M mladā*, *F mladē*? (In Russian Church-Slav. we have the same accentuation; we find *два мѣжа*, (Čud. NT, Luc. 9), *дѣнь нѣтъ*, *рѣчь* (and *рѣчь*).) Thus in reality dual forms point against de Saussure's law having operated in Slavonic. Slavonic \**mōžā* agrees completely with Lith. *kėlmu*.

As far as the Russian plural forms of the type *бѣрегá*, *лесá*, etc., are concerned, it seems probable that only very few of them are old dual forms. The dual disappeared in Russian round about the 13th–14th century (Unbegaun, *La langue russe au XVI siècle*, p. 214), while nom.-acc. pl. in *-á* in the masculine did not become common until the 18th century.

I agree with Unbegaun's explanation (op. cit. p. 216): «L'apparition de la terminaison *-á* au nominatif pluriel du type en *-o-* n'est qu'une étape ultérieure de l'extension générale du vocalisme *-a-* que nous venons de constater pour les désinences des cas obliques. Comme pour celles-ci, le foyer en a été le nominatif-accusatif neutre.» The end-stress in *зородá* is the same as in *зеркалá*.

Unbegaun is undoubtedly right in assuming that some old dual forms occur among the masculine plural forms in *-á*, just as we find the same in the neuter (Old Russian *крылѣ*, *колѣнѣ*) and in the feminine (*брылѣ*, *скулѣ*). Unbegaun believes that this is the case with *розá*, *рыкавá*, *бокá*, *вѣсá*, *уцá*, *глазá*; cf. Čudov NT dual *розá* 154b. In so far as these words are not constantly end-stressed, but belong to the mobile type (as *роз*, *бок*, *глаз*, *вес*), one would have expected root-stress in the old dual form. Nevertheless, as plurals in *-a* were rare and isolated occurrences in the masculine, it is by no means improbable that they may have been influenced by neuters in *-á*, which must have had the same stress in the oblique cases as the mobile masculines. The writer of the Čudov NT may in his living dialect have used *розá* as a plural.

The type Russ. *два тасá*, *рядá*, *разá*, *валá*, *шарá*, etc., has often been adduced as an argument to prove that the dual ending *-a* attracted the accent according to de Saussure's law. But these forms in *-á* also occasionally occur as ordinary genitive forms. (The word *тас* was end-stressed in older times in all forms.) Furthermore, the words with which we are here concerned generally have nom.-acc. plur. in *-ѣ* in modern Russian, and some of these words have adverbial instrumental forms in *-ом*. End-stress after the

numerals two, three, and four is consequently not isolated, and all the end-stressed forms of the paradigms must be considered jointly.

The Bulgarian plural forms *рога*, *крака* may be assumed to have been influenced by the nom.-acc. pl. N. According to Miletic, when used after the numeral 2, we have: *два крака*, *два рога*. (Miletic, *Das Ostbulgarische*, col. 485; cf. Kodov: *Подвижното бълг. ударение* I, p. 20.)

9. Instr. pl. Russ. *головами* : *костью*. I assume that in the first instance a marginal stress has been replaced by columnal stress, which was originally present in words of the type \**ženà*, nom.-acc. pl. \**ženù*, instr. \**ženàmi*; cf. Lith. *galvomis*. Cf. Chapter IV, p. 66 f.

10. Instr.-dat. dual in *-ma*. End-stress in Russian *трѣмъ*, Serbo-Croat. *trima* fulfils the requirements for the mobile paradigm, cf. Lith. *galvôm*.

11. Dat. loc. pl. of the type *головам*, *-âx*. The fact that the stress is not placed on the root syllable can be explained as in the case of *головами*.

12. Forms such as Russian *говядо*, *лопата*, *четыре*; Serbo-Croat. *goveda*, *lopata*, *četiri*. The forms *говядо*, *лопата* belong to rare types of word-formation, where the material for comparison is too small to allow us to make any conclusion of this kind. Likewise *четыре*, Serbo-Croat. *četiri* provides too uncertain a basis, in view of the fact that it is formed in a way which varies from the other Indo-European languages (viz. with the vowel grade *-û-*). As far as stress is concerned Lith. *keturi*, acc. *kēturis* differs from Slavonic in its mobile stress; Gr. *τέτταρες* also differs, but not Sanskrit *catvārah*, acc. *catūrah*.

13. IP.Sg. Russian *тоңу* : *тоңешъ*, *могъ* : *можешь*, *пишъ* : *пишешъ*. I assume that these presents must be considered in connection with the type *ношъ* : *носишь*. Common to all these types is that the root vowel, where it is stressed, has a neo-acute, cf. Russian dialect *тоңешъ*, *можешь*, *носишь*, Čak. *pīšēš*. Here we are faced with another factor in addition to the change of stress, a factor which would remain quite unexplained if we assumed that all these cases would have to be explained by de Saussure's law. I assume, therefore, as do also van Wijk (Arch. f. sl. Phil. 37, p. 1 ff.) and Lehr-Splawinski (Metatonta 11 ff), that *ношъ* as opposed to *носишь* represents the older position of the ictus. I assume that \**nōsiši* has arisen from \**nosiši* through retraction from an inner circumflex. The other types are not parallel, as the ictus is not regularly retracted in proto-Slavonic from a stressed short vowel in a medial syllable. But I consider that there is good ground for assuming that \**tonēši*, \**možēši*, \**pīšēši*, \**jōdēši* have received their later forms \**tōneši*, \**mōžeši*, \**pīšeši*, \**jōdeši* under the influence of the *i*-stems. The type \**jōdeši* must be assumed to belong to the type Sanskr. *tudāti* and to have had originally stressed *e*. Cf. chapter VII 2 b. <sup>† 119</sup>

14. Imperative in *-i* (cf. Russian *пишѹ*, *-ите*; *носиѹ*, *-ите*, etc.). In *-ite*, (*-ēte*) we are undoubtedly dealing with the acute intonation, as ictus

is not retracted. But if we assume that *ношѹ*, *тоңѹ*, *могѹ*, *пишѹ* have preserved their old stress, then no propulsion of the ictus has taken place either in *носиѹ*, *помогѹ*, *пишиѹ*, etc.

15. The contrast Russian *горѣть* : *видѣть*, *носиѹ* : *прѣвѣть*, *писѣть* : *канѣть*, *тянѹ* : *кинѹ*. In the event of the present of *горѣть*, *носиѹ*, *писѣть*, *тянѹ* originally having stressed *-i-*, *-e-*, *-ne-* (cf. 13), the infinitive stress may have been regulated in agreement with the present.

16. Serbo-Croat. Aorist 1st. pers. sing. *klēh* : 3rd. pl. *klēše*; *mrījeh* : *mrījēše*; *žēh* : *žēše*. It should suffice to observe, with Kurylowicz, that the 1st and 2nd persons plural too — where de Saussure's law was to have been inoperative — have an old final stress: *klēsmo*, *klēste*, etc. (l.c. p. 75). The paradigm is originally one with end-stress. 1st person singular *klēh* does not throw the ictus back on a preposition: *zāklēh*. Thus here Štokavian<sup>†</sup> represents a neo-acute, and this is confirmed by the Posavian 1st person singular *zaklē*.

17. Serbo-Croat. Aorist: *kōvah* : *kōvā*, *igrah* : *igrā*, *lōmih* : *lōmī*. Those who invoke de Saussure's law as a basis for explaining these forms, must at the same time answer the question : why do the 2nd and 3rd person singular of the *s*-Aorist have a circumflex in the final syllable, while an acute is to be found in front of *x/š/s*? I take it that in this case we are dealing with two different formations, as in *věš* : *vede*. The forms *lōmih*, *kōvah*, *igrah*, etc., are *s*-Aorist, formed on the basis of the infinitive stem. In *lōmī*, as in *vede*, I see an Ieur. imperfect. The type *kōvā* (to which *igrā* has probably been formed by analogy), I associate with Lithuanian dial. *kāvo*, etc.

I consider, however, that the main point at issue is as follows: if we accept de Saussure's law in Slavonic, it will be very difficult to explain the movement of ictus in the Slavonic paradigms. There will be no way of explaining the fact that in the dual we have \**ōba*, \**ōbē*, \**mōža*, \**ōci* while Lithuanian has *abū*, *abi*, *ponū*, *aki*; the same applies to the accusative plural *zōby*, *rōky*, while Lithuanian has *ponūs*, *rankās*.

On the other hand van Wijk, who explains the alternation of ictus in the Slavonic *o*- and *ā*-stems with the help of de Saussure's law, is forced to regard the genitive and dative ending of the *ā*-stem as acute — cf. Russian *сторонѹ*, *сторонѹ* (l.c. 30). But in Lithuanian these endings have a circumflex, and also in Greek: *dainōs*, *dainai* — *αλφῆς*, *αλφῆ*. (Owing to a misunderstanding he considers the dative singular to be end-stressed in Slavonic, but cf. Old Russian and dialect *κ τῶρονъ*, Lith. *dainai*, and the root stress in Serbo-Croat. in cases such as *dūsi*, *rūci*, *nōzi*).

It is only possible to arrive at a rational explanation of stress in the Slavonic substantives and adjectives by comparing them with the Lithuanian types *galvā*, *kēlmas* — and not with *rankā*, *pōnas*. Thus the Slavonic

paradigms agree best, as far as stress is concerned, with the Lithuanian paradigms where de Saussure's law has not operated.

Note. As a later chapter will show, in many old Russian and Russian Church Slavonic<sup>8</sup> texts we find instances of stress on the first syllable in the 1. p. sg. of the «end-stressed» verbs, while it is mostly on the end syllable in verbs with recessive accentuation: Čudov N.T. *спяду, хіуєу, рёкоу, мёбрю* : *молю, прудоу, нуиу, мозоу*. Stress on the first syllable in the 1. p. sg. is also to be found in Bulgarian dialects and even the Slovianic accentuation of the present tense might perhaps be interpreted in this way. It is very difficult to explain this accentuation as an innovation in Russian. The fact that we find end stress in Serbo-Croatian, Slovene and — indirectly attested — in Slovak, is not conclusive, as in these languages the old form has been replaced by a form in *-m*. If, as I believe, old Russian *хіуєу*, etc., represents the proto-Slavonic accentuation, one would have to assume that *-o* in the 1. p. sing. was circumflex, if de Saussure's law were to hold good in Slavonic.

## II. THE SLAVONIC SYSTEM OF INTONATIONS

A common feature in Baltic and Slavonic was the contrast acute : circumflex in long vowels. It is generally assumed, and probably rightly so, that the acute was a rising intonation as in Slavonic, Old Prussian and Latvian, and that the circumflex was falling as in these languages. In Lithuanian both intonations have changed character, with the result that the acute has become a falling intonation, and the circumflex has become even or rising. The short vowels originally showed no phonological difference of intonation. In Lithuanian, as far as melody is concerned, they were closest to the circumflex. In Slavonic the same seems to have been the case in the first syllable, cf. the retraction of the ictus to a preposition from stressed initial syllable with short or circumflex vowel. Cf. also the advancing of the ictus from a circumflex or short stressed syllable in Slovene. In a stressed internal syllable short vowels in Slavonic were rising. This is shown by the fact that ictus is not retracted from a short internal syllable, and that a short stressed inner syllable, which receives secondary lengthening, is given a rising intonation in Slovene and Serbo-Croat. (cf. Slov. *gotóviti*, Čak. dative plural *krovón*), and that Russian dialects with two *o*-sounds have *o* in this position: *gotova* in the same way as *vol'a*. Cf. p. 17.

Structurally we may express this as follows:

Acute is the intonation of a vowel which retains the stress throughout the paradigm. It can occur in any syllable.

Circumflex is the intonation which occurs in the first syllable when other forms of the paradigm have the stress on the last (this last-mentioned point can only be clearly demonstrated in a subsequent chapter).

In proto-Baltic both intonations could occur in any syllable (stressed or unstressed).

As it seems much more difficult to derive the Baltic state of affairs from the Slavonic than conversely, I find it already *a priori* probable that Baltic represents the older stage. I consider that it is an error in Kuryłowicz's work on accent that he takes the opposite point of view as his basis.

The development of intonations in the various Slavonic languages is well known, and I consider it superfluous to deal in greater detail with the subject at this stage. It is sufficient merely to mention the main principles: in Serbo-Croatian the acute vowel has been shortened ('), while the circumflex vowel has preserved its falling length in monosyllabic and disyllabic words (˘); in Slovene all stressed vowels with the sole exception of *ə* are long outside the final syllable. The acute is long and rising (ˊ), while the circumflex is long and falling (˘). In the final syllable acute vowels are shortened, while circumflex vowels remain long. In Czech acute is represented by length in the first syllable of disyllabic words, while circumflex is short. In Lekhite both have been shortened. In Russian, where both quantity and intonation have disappeared as phonological elements, only pleophonic combinations still mark a distinction between the former acute and circumflex, circumflex *r* and *l* diphthongs being represented by *ére, óro, ólo*, acute by *eré, oró, oló (oro, olw* in the dialects which have two *o*-sounds).

However, in Slavonic a secondary rising intonation, the so-called neo-acute, has developed. There is no disagreement with regard to the fact, but the question of its origin — apart from a single clear case — is a subject for discussion, and it is my intention to make some contribution to this discussion in the following. I shall try to show that a neo-acute arises through retraction of the ictus to a syllable from the one immediately following it, in other words that neo-acute is structurally an intonation which can occur in any syllable in a word, when other forms within the paradigm or etymological group have stress on the subsequent syllable, and no skipping of syllables ever takes place in the process concerned.

Thus neo-acute does not arise as a result of metatony, if by this term is implied a change of intonation within one and the same stressed syllable. Neo-acute occurs in syllables which were not previously accented.

Neo-acute on a long vowel is only represented in Čakavian, Kajkavian



and certain archaic Štokavian dialects by a separate intonation, differing both from the old acute, which had been shortened, and from the circumflex. This is the intonation which in Čakavian is symbolised by ' : *pīšeš*, *krāl̃j*, and which Ivšić in his description of the Posavina dialect and Kajk. dialects has symbolised by ~<sup>9</sup>. In Štokavian (apart from the archaic dialects mentioned) neo-acute has coincided with circumflex: *pīšeš*, *krāl̃j*. In Slovene the neo-acute has fallen together with the old acute: *pīšeš*, *krāl̃j*. In Czech the neo-acute is represented by a long vowel: *pīšeš*, *krāl̃*, *budī*; in Lekhite it is also represented by a long vowel, for which reason in Polish we find *pochylenie*: *wrócisz*, *król*. In Russian in liquida combinations it produces the same result as the old acute: *король*, *молотушъ*. Thus we see that this intonation, wherever it has been preserved in an old long vowel, has resulted in the vowel length being retained.

In the same cases where the stress is retracted to a long vowel which becomes neo-acute, we also get retraction to short vowel. This results in a rising *e*, *o*, *z*, *v* in the first syllable, and in the establishment of a contrast between rising and falling short vowels. In Serbo-Croatian this proto-Slavonic difference of intonation in short vowels has disappeared, so that both falling and rising short vowels have become falling: *vōlja*, *mōžeš* in the same way as *bōga*. Only in Kajkavian do we in many cases (but not in all) find a special representative for rising *e*, *o*: *zēlje*, *grōblje*; *sēla*; *lōnec*; *kōni(h)*; *dōbri*, *ōsmi*, *žēnski* (Ivšić, Ljetopis 48, p. 72)<sup>10</sup>. In Slovene, on the other hand, where all stressed vowels outside the final syllable are long, the representative of an old neo-acute short vowel is rising (*ó*, *ó*, *é*), while the non-neo-acute short vowel is falling (*ô*, *ô*, *ê*), except where the stress has been transferred to the following syllable: *mōrem*, *vōlja* : *Bōg* : *slovô*. In Czech the neo-acute *o* has been lengthened in most cases, and has then fallen together with the old *o*, wherever the latter has been lengthened through the disappearance of *-z*, *-v* : *Boha* but *mūžes*, *vūle* and *Būh*. In certain cases *o* occurs where one would have expected *û*. This applies to *i*-verbs, *ne*-verbs and verbs in *-ie-* (infinitive *-ati*) of the accentuation type Russian *ношý* : *носишь*, *гложý* : *гложишь*. Cz. *nosiš*, *ořeš* (but *stūnu*, *stonati*). In Polish we find no *pochylenie* of neo-acute short vowels (apart from cases where a semi-vowel has disappeared in the next syllable); thus we find *możesz*, *wola*, *nosisz*. (Slovincian has however *mūžes*, *mōužes*). In Russian the dialects which have two *o*-sounds have: *vola*, *mōžeš*, *nosīš*, *koñ* but *voz*, *gōru*.

From this I conclude that short vowels too became neo-acute in proto-Slavonic, and that at a later proto-Slavonic stage there also existed a difference of intonation in the short vowels. I find this explanation simpler than Vaillant's explanation (*Grammaire comparée*, p. 265 ff.), according to which Czech *û*, Russian *ω* are caused by secondary analogical lengthening

due to the influence of parallel forms with long neo-acute. Why, then, do we find *û*, for example, in Czech *mūžeš*, *kūže*, where we have no parallel with an old long vowel?<sup>11</sup>

In this work I intend to use the following accentuation marks:

Over a long vowel: rising I (Acute): ' , rising II (Neo-acute): ' ,  
falling (Circumflex): ^

Over a short vowel: rising: ' falling: "

A number of scholars include a fourth type of accent in proto-Slavonic, viz. neo-circumflex.

One thing is certain: already in proto-Slavonic we find cases of real metatony: circumflex of long monophthongs which have not received their stress as a result of secondary transference. Numerous instances of this kind are to be found especially in Slovene and the Kajkavian dialect of Serbo-Croatian. The question is now in the first place how much of this is proto-Slavonic, and secondly whether we are dealing with a special intonation or whether we need only operate with ordinary circumflex.

Neo-circumflex as a separate phonological intonation, on a par with the neo-acute in Čakavian, does not exist in any living Slavonic language. It has been assumed that it represented a special intonation in the past, an assumption based on the behaviour of metatonic circumflex. Where neither the intonation itself nor its behaviour differs from ordinary circumflex, there is no reason to assume the existence of a separate intonation. The question of a «neo-circumflex» arises in cases where one or several languages has a circumflex which (1) can stand in an internal syllable and (2) is not displaced according to the laws valid for the ordinary circumflex in the languages in question, e. g. Slov. *lêzem*, *lêze*, not «*lezem*», «*lezê*». (That it is not influenced by de Saussure's law, is also an argument of those who insist that this law operates in Slavonic. As far as we are concerned we do not recognise this law in Slavonic.)

The problem of the neo-circumflex is unusually complicated, and we must first of all run through the various cases where we find circumflex in Slavonic instead of acute, as we might have expected.

1. We have mentioned the irregular circumflex in mobile substantives and adjectives of the type Serbo-Croat. *dâr*, *nâg*, *glâvu*, etc. I explained this intonation by analogy on the basis of the mobile intonation (p. 14). These formations exhibit the normal qualities of circumflex, and their circumflex has never been regarded as «neo-circumflex». To the same class undoubtedly belong the aorists of the type Serbo-Croat. *klâde*, *pâse*, *striže* *prêde*, *grîze*, *krâde*, *sîječe* (present *klâdem*, *pâsem*, *strižem*, *prêdem*, *grîzem*, *krâdem*, *sîječem*, etc.)

2. In presents of the type \**nošê* : \**nošîši* the *-i-* was, in my opinion, circumflex (p. 22). This circumflex has in my opinion caused the retraction



of the ictus in all persons except the 1. p. sing. My explanation contains the assumption that this circumflex had the qualities of the old circumflex.

3. The same holds good for the *-a-* in the perfect participle passive of verbs in *-āti*: cf. Russian *нанѣсанъ, вочнѣманъ*, Čak. (Novi) *pisān, pītān*.

4. Certain long-vowel verbs with a mono-syllabic infinitive stem have the circumflex in a number of finite and infinite forms:

a. Aorist: Serbo-Croat. *bī* (was), *dōbī*; *dā, li, pōli, pī, vī* besides *bī* (beat) *gnjī, krī, čū*.

b. *L*-participle: Serbo-Croat. *dāo* (F *dāla*), Čak. *dāl* (F. *dālā*), *prōdāl* (*prodālā*); *bīo* (*bīla*) «was», Čak. *bīl*; *pīo* (*pīla*), *līo* (*līla*), besides *čūla, krīla, mīla, vīla* (R. *svīla*).

c. Perfect participle passive: Serbo-Croat. *dān* (*dāt*), Russian *проданъ*; Serbo-Croat. *bīt, lit* besides *bijen* (*bjēn*), *čūven* . . .

None of these circumflexes shows any qualities which place it in a different category from ordinary circumflex. Nor have they ever been considered «neo-circumflex».

5. Supine. This form has disappeared from living Slavonic dialects, apart from Slovene. However, its quantities in old Czech (and in some forms surviving in new Czech) provide us with certain data to work on. Although the material is limited there is no doubt that van Wijk (Intonationssysteme, p. 106) is right in assuming circumflex in monosyllabic forms: Slov. *krāst, pāst, klāst, vīt, krīt*, Old Czech *bit, kryt, ryt*, cf. Bulačovskij, Zeitschr. f. slav. Phil. IV, p. 69 ff. In the Slovene dialects we find the contrast between the supines *ljūbit, hōdit, stēpat, strādāt* and *drobit, dajāt, snovāt*. As I shall show later on, I consider the last-named forms to have been originally root-stressed: *\*drōbit > drobit* as *\*nōgo > nogō*, while the first series has arisen as a result of retraction from a short vowel: *\*ljubit > ljūbit*. The circumflex in the monosyllabic stems is presumably of the same type as we find in *\*sŷn̄s*. The supine *\*bŷt̄s < \*bhūtum* is the accusative singular of a mobile *u*-stem.

In Lithuanian, too, in the third person optative, which was originally supine, we find dialectal circumflex. This has caused van Wijk to assume (l.c.) a Baltic-Slavonic metatony. But the Lith. circumflex may be the result of retraction in Lithuanian, and may have arisen at a relatively late stage. Endzelin, KZ 44, p. 49 f. adduces numerous examples of the type *būtū, duotū, -stotū*s, etc., from Daukša, and *duot* besides *duotū* from Dusetos (Wolters Chrestomathy.)

6. The genitive plural of words with an acute stressed long vowel in the last stem syllable. This metatony is undoubtedly proto-Slavonic, as it is found in Serbo-Croatian, Slovene and Czech: Slov. *līpa : līp, dēlo, dēl*, Čakavian *krāva : krāv, dēlo : dēl*, Czech *kráva : krav, dilo, děl*.

Here «neo-circumflex» is generally assumed. The question then arises whether the circumflex of the genitive plural differed in its quality from «old» circumflex. We must consider whether this circumflex could subsist in an inner syllable. If so, it differed from the old circumflex. In words where the penultimate stem syllable is short outside the genitive plural and bears the original stress, the ictus is withdrawn in Štokavian in the genitive plural to the vowel of the preceding syllable, if this is short<sup>12</sup> (Leskien, Gr. § 612): *ùnuk : ùnūkā, kōljeno : kōljēnā, lōpata : lōpātā blizānak : blizānākā, prōzor : prōzōrā*. The new ictus vowel does not cause the ictus to be thrown back on the preposition: *ōd jezīkā* not «*ōd jezīkā*». This indicates in principle a neo-acute. In an old long vowel one would then have expected the length to have been preserved. When we find e.g. *sĵēkīrā* we must therefore assume, either that retraction is so recent that *sĵ-* at this stage was shortened, or that a levelling of quantity has subsequently occurred. In Bulgarian Kodov (Подвижното бълг. ударение p. 19) notes similar cases of retraction: *годинъ : годинъ<sup>13</sup>, стотинъ, хилъ<sup>14</sup>*. But in some of the Čakavian dialects we find the type *susēd*, etc. However, the fact that in most Slavonic languages with a free accent we find no trace of this retraction, is not a decisive argument against its proto-Slavonic origin, since the genitive plural in this way receives a different place of stress from all the other forms of the word concerned. *A priori* this accentuation was not likely to have subsisted over a wide area. It would be easy to explain Čakavian *susēd* beside Nom. *susēd*, etc., as an analogical formation similar to *rāk : rāk*. A more potent argument to the effect that the metatonic circumflex in the genitive plural possesses other qualities than those of ordinary circumflex, is the fact that the ictus is not retracted to prepositions in cases such as Serbo-Croat. *dō krāvā*. But it must be borne in mind that the genitive plural was the only form of the paradigm where, in this type of words, retraction to the preposition would occur, and that this might have resulted in levelling. (The type *ōd jezīkā* mentioned above, cannot easily be explained by a levelling of this kind, as here the genitive plural already had the stress on a different syllable from the rest of the case forms.) There is, however, no difficulty *per se* in explaining the retraction in Štokavian *lōpātā, sĵēkīrā* as late. The retraction from falling intonation in an internal syllable continues to operate in all the separate Slavonic languages. On the other hand there is no difficulty in explaining Čakavian *susēd* by analogy. The short vowel in the first syllable of *jēzīkā, sĵēkīrā* can easily be put down to levelling, in view of the fact that *\*jēzīkā, \*sĵēkīrā* would deviate considerably from all other forms of the paradigm. The types *lōpata : lōpātā, prōzor : prōzōrā* might provide the pattern. At any rate, the gen. pl. does not provide a clear example of «neo-circumflex».

7. The stressed long vowel in root-stressed present paradigms has circumflex in Slovene: (*lêzeš, bôdeš, mâzeš, bâviš, dêlaš,*) and in Kajkavian. In *e/o*-verbs we find the same accentuation in North Čakavian: *vêneš, kriješ, brišeš*, but *bâviš, pîvâš*. In Štokavian this accentuation does not exist (*dîgnêš, bājêš*, etc.).

As no movement of the ictus to the following syllable has been caused by this circumflex in Slovene, it must be assumed that in Slovene a separate intonation once existed, which we may reasonably call neo-circumflex. But this is still no confirmation that the phenomenon goes back to proto-Slavonic times. The Czech forms cannot, as is frequently done, be adduced in support of this: in Czech *budeš, kryješ, baviš*, the first syllable may quite easily have contained an old acute, which was shortened in the first syllable of polysyllables (cf. *jahoda*).

As far as Slovene is concerned, *bâviš, dêlaš*, as well as the perfect participle passive *namâzan* (from *mâžem*) can be explained on Slovene grounds by the tendency in this language to produce a circumflex where the next syllable contained an old long vowel (which has subsequently been shortened). Cf. Serbo-Croat. *nôsiš, pîtaš, pîsân*.

This would agree on the whole with the alternation between acute and circumflex vowel within the Slovene conjugations: here we find a circumflex vowel in cases where the following vowel is long in Serbo-Croatian:

Slovene	Serbo-Croat.	Slovene	Serbo-Croat.
<i>dêlati</i>	<i>pîtati</i>	<i>mîsliti</i>	<i>gâziti</i>
<i>dêlaš</i>	<i>pîtaš</i>	<i>mîšliš</i>	<i>gâziš</i>
<i>dêlaj</i>	<i>pîtaj</i> (secondary lengthening)	<i>mîsli</i>	<i>gâzi</i>
<i>dêlal, -ala</i>	<i>pîtao, -ala</i>	<i>mîslil, -ila</i>	<i>gâsio, -ila</i>
<i>zdêlan</i>	<i>pîtân, -âna</i>	<i>mîšljen</i>	<i>gâžen</i>

The form *mîšljen* may be ascribed to levelling, due to the influence of verbs with the perfect participle passive in *-ân-*.

Slovene	Serbo-Croat.
<i>mâzati</i>	<i>pîsati</i>
<i>mâžeš</i>	<i>pîšeš</i>
<i>mâži</i>	<i>pîši</i>
<i>mâzal, -ala</i>	<i>pîsao, -ala</i>
<i>mâzan</i>	<i>pîsân, -âna</i>

In explaining the state of affairs in Slovene one might *a priori* consider it sufficient to assume that here, as in Štokavian, *e*-presents at one time had a long *e*<sup>15</sup>, lengthened under the influence of the *i*- and *â*-verbs, or as a result of the disappearance of *-b* in the third person singular.

But this does not seem to tally with the short thematic vowel in the verbs which have preserved final stress: *cvatêm, -êš*. The same is the case in Kajkavian, where according to Rožić's description of the dialect in Prigorje (Rad 115, 116, 118) we find the conjugation *rečem, rečeš, reče...* (op. c. 118, p. 63) with retraction of the ictus from the short terminal vowel (as contrasted with *gasîm, gasîš, gasî...*). In Prigorje we find the same circumflex in front of an original long-vocalic final syllable as in Slovene. In both these idioms, however, the circumflex can be explained in the root-stressed thematic flexion as being the result of levelling. In conformity with the sound laws Slovene had the types 1. *mîslim*, 2. *môtim*, 3. *budîm*; 1. *dêlam*, 2. *stôpam*, 3. *končâm*. It is then possible that instead of 1. *\*lêzem* (older *\*lêzq, \*lêzeši*) beside 2. *môrem* and 3. *plêtem* < *\*pletêm*, *cvatêm*, the form *lêzem* arose. We can probably assume in older Slovene *\*mîslim, \*dêlam, \*lêzem* with a real neo-circumflex as an intermediate stage between " and ˘.

In North Čakavian, too, we can find no lengthening of the thematic vowel *-e-*, or any grounds for supposing that this vowel was ever lengthened (*dâjêš, brišeš, pîšeš*). We find (Novi): *ginên, brišên*, etc., but *bâvîn se, dêlân*. Furthermore we have the accent " in other cases where Slovene and Kajkavian have ˘ in front of an old long vowel in the next syllable: *pînezi, mîsêc, kâmik*, instr. *krâvûn*, loc. pl. *câsih* — Slov. *pênez, mêsec, kâmik, krâvo, râkih*. It is therefore quite logical that North Čakavian has preserved *bâvîn se, pîvân*. But this suggests that circumflexion in the type *ginên, brišên* is not linked up with length in the following syllable. In North Čakavian, moreover, we find secondary circumflex in certain definite adjectival forms beside acute indefinite forms. Cf. Novi: *stâr, stâra, stâro* : *stârî, stârâ, stârô*. In the Kastav dialect this metatony has been carried through completely.

In the South Čakavian dialects the types *ginêm* and *stârî* do not exist. Perhaps the simplest solution to the problem is that we are dealing here with an irregularity in the isoglosses. Circumflexing, which is a characteristic feature of Slovene and Kajkavian, and for which there is here a reasonable explanation, based, it appears, on certain sound laws, may in its peripheral areas have sent out certain offshoots into neighbouring dialects. This theory is supported by the fact that we find certain irregularities in this sphere in the North Čakavian dialects. In Novi we find *ginên, lâjên, brišên*, but *bûdên*, while in Cres we find *bûden* (Tentor Arch. f. sl. Phil. XXX, p. 185) beside *vidîn, bjûvan*. On the other hand we find in Cres *kâmik, kâvran*. This suggests that here, on the edge of the area, we cannot expect to find a perfectly regular development. As already mentioned, Slovene seems to have possessed a special intonation, neo-circumflex. In Kajkavian there is no need to assume this. The secondary circumflex

may here — and in North Čakavian — from the very beginning have appeared as an ordinary circumflex.

8. In the definite form of an adjective with acute root-vowel, circumflex occurs in the first syllable in the Štokavian, North Čakavian and Slovene areas. Circumflex has been regularly carried through in Slovene, and in North Čakavian in the dialect in Kastav, which Belić deals with in his studies on accent. In Slovene therefore we find *stâri*, *čisti*, *slâbi*, *sîvi*, *zdrâvi*, *prâvi*, *mâlî*, *bogâti*. In Kastav we find the same state of affairs. In Novi, however, we find a circumflex in certain cases but not in others: *dûgi*, *pûni*, *slâbi*, *zdrâvi* but *stârî*, *mâlî*, *prâvî*. In South Čakavian we find no circumflex. In Štokavian we generally find *˘*, but in certain words circumflex: *˘*: *stârî*, *prâvî*, *mâlî*, *rânî*; in the dialects other examples also occur (Belić, Akc. Stud. p. 21). In Štokavian, however, the circumflex may also represent neo-acute, and this is what we find in certain Štokavian dialects with an archaic accentuation: *mâlî*, *prâvî*, *rânî*, *stârî* in Posavina (Ivšić, Rad 197, p. 50). Despite Belić's remarks with regard to Bubrich in Zeitschr. f. sl. Phil. II, p. 12, I consider that this must be regarded as a possibility. In Slovene we must consider here too the possibility of real neo-circumflex. In Slovene the forms of the type *stârî* fit into the group of cases of metatony in front of a long vowel (which has subsequently been shortened). Cases occurring in North Čakavian may well be outcrops from this dialectal area, similar to cases of metatony in root-stressed thematic verbs.

In no case need these changes of intonation go back to proto-Slavonic. As I shall subsequently try to show, changes in intonation in the definite adjective are to a large extent due to contractions in the syllable which follows the stem. These contractions have taken place in the separate languages.

The other cases which have been adduced are in my opinion still less capable of proving the existence of a neo-circumflex as a separate intonation in proto-Slavonic. They can only be shown to exist with any real degree of certainty in Slovene (and possibly Kajkavian).

I believe that Baudouin de Courtenay, Rezijanskij govor p. 82 f., and Valjavec, Rad 132, p. 149 f., are in principle right when they maintain that in Slovene *˘* becomes *˘* when the syllable becomes closed, and that *˘* is changed to *˘* when the following syllable was long. (Valjavec says: long with rising intonation. I can find nothing to support this reservation.) Vondrák supports this theory, Vergl. slav. Grammatik I, p. 297.

In this way we can explain forms such as *bîtkā*, as opposed to Štok. *bîtkā*; *dîmkā*, *māčkā*, as opposed to Štok. *māčkā*; *mîškā*, as opposed to Štok. *mîškā* and further Slov. *igrāne*, *pisāne*, *brātja*, *zdrāve*, as well as *dēdek*, *brātek* (on the basis of the oblique cases).

Furthermore we can explain forms such as Slov. *žîtar* — Štok. *žîtar*; *kôžar* — Štok. *kôžar*; *gâvran* — Štok. *gâvrân*; *gâvez* — Štok. *gâvēz*; *mêsec* — Štok. *mjêšec*; *pênez* — Štok. *pênězi*; *jâstreb* — Štok. *jâstrēb* *vîtez* — Štok. *vîtēz*, .. Moreover *bêlež*, *bâbež*, *grâbež*, *mêrež*, *lêtos* (this year), *žîtelj*, *videz*, *vêdez* and similar forms probably also belong to this category, as a result of lengthening in a new closed syllable.<sup>16</sup>

In these and similar cases, of which there are no certain traces outside Slovene (Kajkavian), I find not only no grounds for assuming a proto-Slavonic neo-circumflex, but I find grounds for not doing so. In Slovene one can classify these neo-circumflexes in various large groups, and this gives an impression that here they have a broader phonetic foundation, even though the precise sound-laws have not as yet been formulated. Thus *gâvran* is supported by *žîtar*, *jâstreb*, etc., which suggests the sound-law I have just mentioned. But how could one explain Štokavian *gâvrân* as originating from *\*gâvrân*? Slovene *māčka* belongs to a type which is common in Slovene (cf. *bîtkā* = Štok. *bîtkā*), etc. But how could we explain *māčka* from *māčka*? How could we explain *dûbrava* (< *\*dubrâva*) from *\*dubrâva*? There are no analogous cases to support such a development in Serbo-Croat., but in Slovene we find a number of formations with circumflex belonging to each of these types. This suggests that Slovene has carried out a number of circumflexions, and thus that a Slovene (and Kajkavian) circumflex, which finds no support outside these dialects, need not be proto-Slavonic.

Of isolated circumflexions of this kind I might mention:

1. Instr. singular *lîpo* < *\*lîpō* < *\*lîpojo*: cf. *gâvran*, *mîliš*. Czech. *lipou* (Nom. *lîpa*) is not significant in this respect, as it is only in original disyllabic forms that the acute is long in Czech.

2. *rāk*, gen. *rāka*, etc., has genitive plural *râkov*, instr. *râki*, loc. *râkih*. In the locative plural the last syllable was originally long: cf. Čak. *čāsîh*. The same must have been the case in the genitive plural, where the vowel in the syllable immediately before the *-z* seems to have been lengthened in Slovene as in Serbo-Croat. (Slov. *kônj* as opposed to nom. Sg. *kônj*. Cf. further *grobov*). But here an originally acute vowel seems to have become circumflex as early as proto-Slavonic. In the instrumental plural too Slovene shows a long vowel in the final syllable where this is stressed: *stâbrî*. (Czecho-Slovak dialects also have examples of this: *chlapý*, *vratý*, see Trávníček, Hist. mluvnice česko-slov. p. 249).

3. Neuters with root-stress and acute in the singular have circumflex throughout the plural: *lêto*, *lêta*, *lêtu*, etc., plural: *lêta*, *lêt*, *lêtom*, *lêti*, *lêti*. Here the circumflex is clear in the genitive plural, where it is of proto-Slav. origin, and in the instrumental and locative plural, where it agrees

with Slovene rules (2). In the other cases it is certainly due to the influence of the genitive, locative and instrumental. Czech *léto*, plural *leta*, *let*, *letům*, *lety*, *letech* are not proof of neo-circumflex in the plural in proto-Slavonic times. The genitive and the dative and locative (which were polysyllabic forms) should all have *e*, and from these forms the nominative, accusative and instrumental were able to acquire their short *e*. It should be remembered that the genitive plural is a form which occurs very frequently in this word. There is also another possible explanation of the locative and instrumental in Slovene. According to Breznik, Slovenska slovnica za srednje šole p. 78 f, *ráku*, *kónju* are used as dative singular, but: «Pri predlogu ima daj. edn. često padajoč naglas, n.pr. *k brátu*, *h kónju*». There is therefore a possibility that, at any rate in the instrumental plural, which has a monosyllabic ending, and which is always accompanied by a preposition, the same intonation rule may have operated. The locative singular *pri kmētu*, *pri orēhu*, *na obrāzu*, *pri jūncu*, *pri kovāču* (Valjavec, Rad 132, p. 158) can also be explained in this way. It is possible, however, that the loc. sing. has been influenced by the loc. plur.

4. In a great many substantives a Slov. *o* in the penultimate syllable in *ā*-stems corresponds to a short vowel in Štokavian: *zabāva* (Serbo-Croat. *zábava*), *dobrāva* (Serbo-Croat. *dùbrava*), *besēda* (Serbo-Croat. *bèsjeda*), *rakīta* (Serbo-Croat. *rákita*), *osnōva* (Serbo-Croat. *òsnova*). There is admittedly in Serbo-Croat. also another type, cf. Čak. *pōsuda* (beside *posūda*), Štok. *dōplata*, *dōsada*, *ōplata*, *ōprava*, *ōsveta*, *ōstava*, etc. (Vondrák, Vgl. Gr. I p. 694 f). According to sound-laws this would have produced in Slovene the sort of forms we do actually find. But at any rate this cannot be the whole explanation. In Kajkavian (Prigorje), too, where we do not find the Slovene advancing of the accent from a short or circumflex vowel, we find: *posūda*, *otāva*, *oprāva*. Czech *pověra* beside *vira*, etc., are no proof that this metatony is proto-Slavonic, as it is only in the first syllable of dissyllabic words that the acute is represented by length. A number of dissyllabic *ā*-stems also have this intonation in Slovene: *nūda*, *vidra* (Serbo-Croat. *vīdra*), *pāra* (S.-Cr. *pāra*), *mōlža* (S.-Cr. *mūža*), *klāja*, *krāja*, *prēja*, *grīža*, *kōča* (S.-Cr. *krāda*, *prēda*, *grīža*, *kūča*) To the same type probably belong:

5. Nominative singular feminine and nominative-accusative plural neuter in *-āla*, *-ila* in forms with an old stress on *a*, *i*: *čēsāl* (< *\*česāl*), *čēsāla*, *čēsālo*; *hōdīl* (< *\*hodīl*), *hōdīla*, *hōdīlo*. In Kajkavian (Prigorje) we find for example: *kāl* (< *\*kalo*), *kāla*, *kālo*, Pl. *kāli*, *kāle*, *kāla*. In Slovene the rule does not apply to *ē*-verbs. In Kajkavian (Prigorje), however, it applies in full: *žēlel*, *žēlēla*, *žēlēlo*, *žēlēli*, *žēlēle*, *žēlēla*; *mīl*, *mīla*, *mīlo*, *mīli*, *mīle*, *mīla*.

6. Instrumental plural, Slov. *nogāmi*, dative-instrumental dual *nogāma*.

The first can also be explained as a case of circumflexion in front of a long vowel, as *-mi* had a long *-i*, cf. *možmī*. Cf. also Czecho-Sl. dialect *cestamī*, *vlasamī* (Trávníček, Hist. mluvnice, p. 249). The ending *-ma* had a short vowel, cf. *stābromā*, but *-āma* may have been influenced by *-āmi*.

7. Imperative: *plēti* : *pletīmo*, *pletīva*, *pletīte*; *cvēti*, *-īmo*, etc. The Imper. *mīslī*, *mīslīte* (not *\*mīslī[te]*) beside present *mīslīš*, indicates that the *i*-sound has been re-lengthened at a recent date. Thus we cannot assume any proto-Slavonic circumflex here.<sup>17</sup>

Other facts too may be mentioned. The suffix *-itā* for example regularly has circumflex in Slovene and Kajkavian (Prigorje), while an acute must be postulated in Serbo-Croat.: Slov. *srđit*, Serbo-Croat. *srdīt*. In all the cases I have mentioned here, from and including point 1 (*lipo*), we find no parallels outside Slovene (Kajkavian). In certain cases it is quite clear that the Slovene circumflex is secondary, and as Slovene has extended the role of the circumflex, the presumption is that Slovene, rather than the other languages, has a secondary intonation wherever a contrast exists.

It would of course be possible to suggest that neo-circumflex in certain cases had become acute in Serbo-Croat., viz. that for example *gāvran* had arisen from *\*gāvran*, *māčka*, from *māčka*, etc., by a regular sound law. But in so doing one would have to accept a different development here from that in Čakavian *vēnēn*, *brīšēn*, *stārī* (and Štok. *stārī*). The only words where a circumflex, corresponding to Slovene neo-circumflex, actually occurs in Serbo-Croat. would not be covered by this explanation.

I assume therefore that Slovene (and Kajkavian) have followed special tendencies in their development in this respect, and though I am unable to formulate a precise law, I consider that the question itself lies outside the scope of this work.

There is however one more argument in favour of the existence of a proto-Slavonic neo-circumflex, which must be examined. In his work «Studja nad akcentem slowiańskim» T. Lehr-Splawiński comes to the conclusion that in Slovincian the ictus is retained in its old position without being retracted, if the proto-Slavonic ictus vowel had one of the secondary intonations: neo-acute or neo-circumflex. He succeeds in showing that in many cases where Slovene has a secondary circumflex, Slovincian has an apparently unretracted ictus.

Now, as already mentioned, there is nothing about the vowels concerned in themselves which labels them as neo-circumflex in Slovincian. They have «short-stage vocalism» which is also the case with old acute and circumflex. («Kurzstufenvokal» and «Langstufenvokal» are the expressions used by Lorentz in his Slowinzische Grammatik). «Long-stage vocalism», which on the whole covers Polish *pochylenie*, but which is also developed in certain cases where *pochylenie* cannot be established in Polish (in

the vowels *i, u*)<sup>18</sup>, is due partly to neo-acute of a long vowel and partly to disappearance of a semi-vowel. It may also have other sources. Where this «Lekhite length» coincides with the proto-Slavonic ictus, this ictus was retained in Slovincian. Similarly the proto-Slavonic ictus is retained if it occurred on the syllable preceding the Lekhite length. The instances in Slovincian which appear to have retained the ictus in its old place and where, owing to parallels in Slovene, a neo-circumflex has been suggested, are as follows:

1. Slovincian nom. acc. plural neuter *kolāna, kopāta, korāta*, etc., from sing. *kuolano, kuopāto, kuorāto*, etc., cf. Slovene *kolēno, kopito, govēdo*: pl. *kolēna, kopita, govēda*, etc. But here the Slovincian forms may be due to analogy with the types *jězero* : *jězura* < \**jězero* : \**jězerà*.

2. Feminine compounds with a prepositional first component of the type *zábāva, poprāva, přégārda, přislāga, peplāta*, cf. Slovincian *zabāva, dobrāva*, etc., (Serbo-Croat. *zabava*, R. *zabása*).

But according to Lorentz, Slowinz. Gramm. p. 190, these substantives in Slovincian belong to the mobile category, with stress on the first syllable in the acc. sing., nom. acc. pl. dual, and the stress on the last stem syllable in the other cases. This schema corresponds historically to the mobile stress of the type of Russian *сководá*. I therefore consider that substantives of the type *zábāva* have received their accentuation as a result of analogical change on the pattern of the type *dobrūota*, etc., which is accentuated in the same way and which was mobile in proto-Slavonic, cf. Čak. (Novi): *dobrotā*, acc. sg. *dōbrotu*, instr. pl. *dobrotāmi*. According to the laws of Slovincian accentuation the two types had come to agree — before levelling took place — in the acc., instr. sing., nom.-acc., dat., loc. pl., nom.-acc., dat.-instr. dual.

3. The present types *nakrādñeš, namāžeš, pobāvjīš* ... Taken independently these provide no evidence, as this position of the ictus has been carried out in all present stems except the athematic. In verbs with neo-acute and «Lekhite length» the ictus should phonetically be retained in this position: *dosīgñeš, napjīšeš*, etc., and likewise it is phonetic in the old «end-stressed» verbs: *domeseš*, etc. In the 1st person singular the ictus is retracted to the first syllable; this may be due to a later development in Slovincian or may in certain cases be of proto-Slavonic origin (Chapter VII A 1c). After the generalisation of initial stress (*dūsīgñā, dūeñesā* etc.) in the 1. p. sg. the accentuation of all verbs may have been levelled according to the pattern *dūsīgñā* : *dosīgñeš, dūeñesā* : *domeseš*. Generally speaking, in Slovincian, where a free ictus has been preserved while intonations have disappeared, a far greater measure of levelling must be expected than in languages where both these prosodic factors are present.

4. Imperatives of the type *zāčñi* : *zāčñima, zāčñita, zāčñimā, zāčñicā*, cf. Sloven. *začni* : *začniva, začnita, začnimo, začnite*. Presumably the Slovincian accentuation must be considered in the light of the fact that, by the addition of an enclitic word, the ictus of the 2nd and 3rd person singular is at the end: *dožjī-lā, pomožū-mjā* (Lorentz, Slovinz. Gr. p. 217, Roczn. Ślaw. VII, p. 57, Bubrich, Sěverno-kašub. sist. udarenija, p. 58).

5. Nominal derivatives such as *bogāctvø, gøspødārstvø, kovālstvø*, cf. Slov. *lisička, dēdøk*, etc. It is probable, as Lehr-Splawiński maintains in his first work on Slovincian accent (Studja nad akcentem pomorskim, 1913, p. 36), that the proto-Slavonic ictus is preserved in Slovincian, provided the syllable concerned has been closed by the disappearance of *z, ь*. In Slovene we do as a matter of fact frequently find a circumflex in this case, but there are hardly any grounds for proceeding via a similar circumflex in Slovincian.

6. A word such as *mūtāka* has instr. *motākou*, gen. pl. *motāk*, dat. *motākoum*, instr. *motākami*, loc. *motākax*, cf. Slov. *lisica* instr. *lisico*, gen. pl. *lišic*. As far as the instrumental singular and dative plural are concerned the retention of the place of ictus in Slovincian is due to the general rule that the old place of ictus is retained in the syllable before a Lekhite length. Locative plurals in *-ax* are treated in Slovincian in the same way as a long vowel ending, in that ictus is not retracted (*raqkāx* in the same way as *raqkōum*). On the pattern of the mobile polysyllabic words, where genitive plural and instrumental plural always have the stress on the same syllable as the dative and the locative, the ictus is placed on the last stem syllable in the genitive and instrumental plural.

7. The «long» adjective forms *bogātī, barānī* ... cf. Slov. *stāri, bogātī*. Here the old ictus syllable is followed by Lekhite length, and should therefore retain its ictus.

8. Locative singular *doklādū, čel'āzī* ... cf. Slov. *obrāzu, orēhu*. The Slovincian forms cannot be detached from the inflexional type to which they belong. The words concerned belong to the mobile schema, (cf. Lorentz, Slwz. Gr., pp. 175, 179 and 196). Locative *doklādū, čel'āzī* is therefore developed from \**dokladū, \*čel adī* of the same type as the Russian *на острóвѣ, на площáдѣ*.

9. In the preterite we find, in Slovincian, the types *pjīsoul, pjīsā, pjīsalo; cignoun, cignā, cignano* but *siezoul, sieza, siezeli; pùokrèl, pùokrāla, pùokrālø; pùobjīl, pùobjīla, pùobjīlo*. Here we find a contrast between the same verbal types which form a contrast with regard to the accentuation of the *l*-participle in Slovene: *hvdīlil, hvalīla, hvdīlilo; tónil, tonīla, tonīlo; česal, česāla, česālo* but *žēlēl, žēlēla, žēlēlo; pokrīl, pokrīla, pokrīlo*. This contrast — and this agreement — are striking. It is however not necessarily certain that they must be explained by a metatony that has taken place

both in Slovincian and in Slovene. In the first place the contrast mentioned exists in Slovene but not in Kajkavian (Prigorje). Furthermore, it is possible that the peculiar variation in Slovincian can be explained by levelling, by the adaptation of a paradigm with a fixed accentuation to the mobile schema, such as we have seen in several other cases. Thus we find for example in Slovincian *dùeždoul* : *dəždā* : *dùeždalo* (Lorentz op. cit. p. 311). This paradigm can be traced straight back to proto-Slavonic *\*dōžьdalъ* : *\*dožьdalà* cf. Russian *дождана́*, Novi *ōprāl* : *oprālā*. Nor are there any grounds for not assuming that *čīnēl*, *čīnīla*, *čīnīlo* continue proto-Slavonic *\*čīnīlъ* : *čīnīlā* : *\*čīnīlo*, cf. Čak. (Novi) *rōdīl* : *rodīlā* : *rōdīlo* (Russian *подуна́*). The fact that the *ě*-verbs do not have this type of accentuation can easily be explained, as the mobile type, from proto-Slavonic times on, seems to have been missing in the *ě*-stems. The correctness of my assumption is borne out by a certain feature in the Kashubian dialect in Jastarnia (Heisternest), which has been described by Bronisch, Arch. f. sl. Phil. 18, p. 366. Here we regularly find in the *ě*-stems: *sēdzōl*, *sēdzāla*, *sēdzālo*, *sēdzēle*; *stōjōl*, *stōjāla*, *stōjālo*, etc. But there are exceptions, viz.: *vīdzōl*, *vīdzāla*, *-ālo*, *-ēle*; *vīsōl*, *-āla*, *-ālo*; *vēdzōl*, etc. (< *vēdēlō*), — in fact precisely three verbs where one might expect old root stress in all forms, cf. Russian *судел*, *-ела*, *-ело*, Old Russ. *судѣлъ* (and Russian *судамъ*). This shows clearly that *\*vīdēlō*, etc., at an early stage was associated with the type *\*čīnīlō*, etc., and that therefore in the feminine *\*vīdēlā* > *vīdzāla* was formed (while the neuter and plural *-ālo*, *-āle*, are analogical, as this accentuation has been generalised in the neuter and the plural in Jastarnia, cf. *pīsōl*, *pīsāla*, *-ālo*, *-āle*, as opposed to Slovincian *pīsoul*, *pīsā*, *pīsalo*). The influence of the mobile verbal classes is thus proved. It is surprising that verbs in *-nōti* have joined this originally mobile type of accentuation, as mobile accentuation of forms in *-nōlō* is not otherwise known.

I conclude therefore that Slovincian cannot give us any basis for assuming a neo-circumflex in Slavonic. The cases where Slovincian forms have been assumed to support Slovene forms, have proved to be easily explainable Slovincian phenomena, and comparison with the Slovene neo-circumflex forms seems to be an illusion.<sup>19</sup>

With regard to neo-circumflex I have come to the conclusion that Slovene has developed a neo-circumflex which must be regarded as originally a separate intonation. It occurs under varying circumstances, possibly to a great extent owing to changes in the nature of the following syllable (shortening of long vowel, disappearance of *ъ*, *ь*, etc.). In Kajkavian we get a corresponding circumflex.

Evidence pointing in the direction of a proto-Slavonic neo-circumflex as a separate intonation is scant, and is only to be found in a few form-

types, among which especially the genitive plural gives grounds for reflection. None of the form-types, however, provides a definite basis for assuming neo-circumflex as a separate intonation. It would hardly be satisfactory to assume an intonation limited to one or a few form types, and under the circumstances I am not inclined to assume a separate neo-circumflex in proto-Slavonic.

### III. ACCENT AND QUANTITY

According to what has been stated in the previous chapter, I assume the following intonations to be proto-Slavonic: acute, circumflex and neo-acute.

Long vowel:      Short vowel:

- |               |   |   |
|---------------|---|---|
| 1. Circumflex | ˘ | ˘ |
| 2. Acute      | ˙ | ˙ |
| 3. Neo-acute  | ˙ | ˙ |

Phonologically (phonemically) ' represents a case of syncretism between acute and neo-acute.

Thus, long vowels show two rising intonations and one falling intonation. The question then is whether all three existed simultaneously. Acute long vowel, as we know, is shortened in Serbo-Croatian, and it is also shortened in Lekhite (Pol. *męka*, «pain» = Serbo-Croat. *mūka*, Russian *мы́ка*). It is long in Slovene, but here short vowels are also lengthened when stressed, while unstressed vowels are always short. We are here confronted therefore with the principle that all stressed vowels not in the final syllable are long, and acute old long vowels may have been shortened, as in Serbo-Croatian, and subsequently lengthened: in closed final syllables acute vowels are short, and circumflex vowels long: *rāk*, *čās*, *sir* : *zrāk*, *brūs*, *člën*.

As we have seen (page 25), in Czecho-Slovak, in the first syllable of an old disyllabic word, acute appears as long and circumflex as short. But it is possible that this may be due to a secondary lengthening of a rising vowel. Rising short vowels are also sometimes lengthened in the first syllable: *mūžes*, *tūnes*, *vūle*. In present forms where neo-acute in the first syllable does not appear in the form of a lengthening (*nosīš*) it is possible that analogy with the 1st person singular may have been responsible.<sup>20</sup>

One might therefore consider the possibility that already in proto-Slavonic the acute was shortened, and if this was the case, the shortening probably took place as an attempt to differentiate the two rising intonations which existed in long vowels. This would then give the following system:

- |                 |   |   |
|-----------------|---|---|
| 1. Long vowel:  | ˘ | ˘ |
| 2. Short vowel: | ˙ | ˙ |
- Cf. Bubrich, RESL. VI, p. 184 f.

Kuryłowicz states (Accentuation, p. 259): «L'accent régressif qui



vient frapper une tranche longue . . y engendre au contraire une intonation montante, appelée néorude, laquelle se met en opposition avec l'ancienne intonation descendante (douce). Du même coup l'ancienne intonation montante (rude) se trouve éliminée du système d'intonations. Les anciennes tranches rudes perdent leur intonabilité et, par la suite, leur quantité longue (au moins dans certains dialectes slaves).

It is probably on general linguistic grounds that scholars have been prone to assume that the new rising intonation in long vowels has led to a shortening of the originally long vowels under the old rising intonation, but it is by no means impossible to argue in favour of three intonations. I am referring to Latvian, where we have «Dehnton», «Fallton» and «Stosston». The fact that the last-mentioned, owing to its glottal stop, occupies phonetically a position of its own, does not alter this fact.

Furthermore I find absolutely no convincing argument that the acute was shortened in proto-Slavonic, and loans from Old Russian to Baltic and Baltic Finnish dialects contradict this, as I shall subsequently try to show. I consider that one should note Kurylowicz's reservation: «au moins dans certains dialectes slaves,» which is in fact all we can state categorically in this case.

Correspondingly I find no reason to maintain that a short neo-acute vowel was lengthened in proto-Slavonic times. In Serbo-Croatian, apart from special cases (gen. pl. and words in *-ije*), we find no lengthening; in Polish we only find lengthening where a *-z*, *-b* has been dropped in the following syllable; in Czech we do not always find lengthening (this fact may, however, be due to analogy, see p. 39). In Slovene we find no lengthening in closed stressed final syllables (*kònj*), apart from the genitive plural. In stressed internal syllables we find rising length, but this is part and parcel of the general Slovene rule for long and short vowels. In Russian dialects *ω* (*uo*, *ρ*) indicates a previous lengthening of *o*, but this can easily be explained as a feature peculiar to this language.

Nor do I find any grounds for assuming that lengthening of short falling vowel before a vanished *z*, *b* is of proto-Slavonic origin. We find this in Serbo-Croatian and Slovene (*bôg* – *bôg*), and under certain conditions in Czech (*bùh*), and in Polish in front of a voiced consonant (*bóg*). [In the genitive plural the phenomenon is widespread]. In Ukrainian we also find the phenomenon (*виз*), but not in Great Russian dialects, which distinguish between two *o*-sounds: here we find *воз* but also *кониъ*. As the latter must be assumed to have had a long *o* in proto-Russian, the former can hardly have had it.

As far as the positions in the word other than the stressed first syllable are concerned, it appears that already in proto-Slavonic times final long vowels became shortened. We find no trace of differences of

intonation being retained in final vowels. This conclusion can be reached owing to the preponderant agreement in this sphere between all Slavonic languages where any difference in quantity at all is to be observed.

However, certain exceptions exist in the separate languages and at least one of them seems to be of proto-Slavonic origin.

In certain cases a final vowel seems to have been lengthened anew. In such cases, in stressed final syllables, it gets in Čakavian neo-acute, which is only a direct consequence of the rising character in Slavonic of all short stressed vowels outside the first syllable<sup>21</sup>. In Slovene, too, the intonation of these long final vowels is rising.

In unstressed final syllables we also find cases of lengthening: in the first place certain *ĩā*-stems seem to have had long final vowel. In Old Polish secondary lengthening takes place due to contraction of proto-Slavonic *-ij-* + vowel: *lodziā*<sup>22</sup> (cf. Ch. Sl. *alēdii*), *sędziā* (Ch. Sl. *sōdii*), Pl. *braciā* (Ch. Sl. *bratija*), *gosiā*, Kochanowski: Nom. Sg. N. *ciernié*, *weselé* (besides *słońce*, *serce*).

In Old Polish we regularly find *dusza*, *miedza*, *niedziela*, *przędza*, *sadza*, *świeca*, *tęcza*, *ziemia*, *zarza* and *zorza*, etc., corresponding to Church Slavonic *duša*, *mežda*, *neděl'a*, *svěsta*, *tōča*, *zeml'a*, *zōra*.

But besides this we also find in a number of cases long final vowel, where in Church Slavonic we do not find *-ija* but only *-a* (< *\*-iā*), for example *burzā* (Ch. Slav. *bur'a*), *dolā* (Russ. *доля*), *groblā* (Ch. Slav. *grobl'a*), *grodzā*, *karmiā* (Ch. Slav. *krāml'a*), *kupiā* (Ch. Slav. *kupl'a*), *placā*, *sprzedzā*, *pracā*, *puszczā* (Ch. Slav. *pušta*), *strožā* (Ch. Slav. *straža*), *suszā* (Ch. Slav. *suša*), *twierdzā*, *wladzā*, *wolā* (Ch. Slav. *vol'a*), *zqdzā* (Ch. Slav. *žęžda*), *woniā* (Ch. Slav. *von'a*). Cf. Slovincian *vūolā*.

This suggests either a late proto-Slavonic contraction in these words or a very early contraction in the particular language concerned. As no language shows any sign of a *-z*, *-b* between the root syllable and *-j-* (Ch. Slav. *-a*, not *-ija*; no doubling in Ukrainian and White Russian), and all proto-Slavonic laws for the development of consonant + *j* have been carried out, it seems reasonable to assume a late proto-Slavonic contraction of *-ija* > *-jā*, *-ije* > *-jē*, etc., in these words.

The difficulty is that *-b* otherwise seems to have been preserved in front of *-j-*, cf. Ch. Slav. *brat(r)ija*, Russian *семья*.

The words we are here dealing with are root-stressed in Russian: *буря*, *доля*, *воля*, *купля*, *продажа*, *пыща*, *суша*. The words where this can be shown in dialects have *ω* for *o*, i.e. neo-acute: *воля*. The *ω* in these words agree with Czech *ů*: *vůle*, *tůňe*, *vůňe*. Neo-acute is obvious in the Čakavian forms: *stráža*, *žēda*. The words *vōlja*, *vōnja*, *kōža* have root stress as in the other languages, but neo-acute is not preserved as a separate intonation in short vowels in Serbo-Croatian.

On the basis of the old Polish and Slovian forms in connection with Čakavian, Russian and Czech we must regard \**kúp'ā*, \**górd'ā*, \**vòl'ā*, \**kòžā*, etc., as the proto-Slavonic forms of these words.

As post-tonic *-ija* seems to have been preserved in proto-Slavonic (Ch. Slav. *brat(r)ija*) and end-stressed *-ijā* as well (Russian *семья*, acc. dial. *сѣмью*), I consider it *per exclusionem* probable that it is the suffix *-ija* which has been contracted, cf. Sedláček, *Přízvuk* p. 180. Through the contraction of *-ija* it is probable that the vowel resulting from the contraction acquired a falling intonation (*-'ā*), and this again explains retraction with neo-acute (as in \**kóltitb*, \**nòsitb* < \**koltitb*, \**nositb*).

The final long vowel in these words has been shortened everywhere except in Lekhite.

A widespread occurrence of length in the final vowel is also to be found in the instrumental plural. In Slovene length is obvious in *stabri*. As there are no grounds for expecting an original acute in the ending (cf. Lith. *põnais*), it is probable that the rising intonation, as mentioned above, is only a continuation of the old rising intonation in short vowels outside the initial syllable, viz. a *-y* which has subsequently been lengthened. In Slovene the ending seems to have been long in post-tonic position too, and to have produced circumflex in the preceding syllable (*rāki*). Neo-acute in the stressed ending of the instr. pl. is also to be found in Posavina: (*s*) *prutovī*, (*sa*) *sinovī*. (Ivšić, Rad 196, p. 232). Length also occurs in Czecho-slovak dialects: *chlapý*, *vratý*, etc. (Trávníček, *Hist. mluvnice* p. 249), and in Slovian *xliuopī*, etc. The reason for this lengthening is not easy to discover. A similar lengthening is to be found in the instrumental ending *-mi*: Slov. *možmī*, cf. *nogāmī*; Czech dial. *cestamī*, *namī*, Slovian *břegamī* (where, however, the *-i* obviously goes back to *-y* from the type *xliuopī*, as *m* has not been palatalised).

Other cases are less widespread. In the nominative and accusative plural neuter we find long *-ā* in some Čakavian and Štokavian dialects. Thus in the dialect of Novi, described by Belić, we find rising *-ā* (< *-a*) in a stressed syllable, but not in an unstressed: *nebesā*, *brimenā*, *ramenā* and *rāmena*, *imenā* and *īmena*, *sēla*, *krīla*. In the Posavina dialect described by Ivšić, Rad 196, *-a* is long both in stressed and unstressed syllables.

In Slovene we find circumflexion in the whole plural N: *lēta*, *lēt*, *lētom*, *lēti*, *lētih*. But here circumflex does not seem to be due to long *-a*, as we have a short *-a* where the quantity is directly visible: *drvā*. Circumflexion probably spread, owing to levelling, from the gen. *lēt*, loc. *lētih* and also from the instr. *lēti*.

In Slovak we find *mestā* (*-a*), *dievčatā*, *srdcia* (*-a*), etc.<sup>23</sup> On the other hand this length does not occur in Lekhite, where secondary length in the final syllable is otherwise well preserved in Old Polish and Pomeranian.

Common to the lengthenings mentioned is the fact that they have not been preserved in the same languages. Long *-ā* in words of the type \**vol'ā* is limited to Polish-Pomeranian, and lengthening in the instrumental plural in *-y* and *-mi* occurs in Czecho-Slovak, Kashubo-Slovian and Slovene, while nominative-accusative plural N in *-ā* occurs only in the Čakavian and Posavian dialects and in Slovak. This is evidence that they can hardly all be of proto-Slavonic origin. I shall return to these instances when dealing with flexion.

Other cases of long vowel in absolute auslaut occur only in a single language. In Serbo-Croat. (Štokavian) *-ā* and *-ī* are long in the second and third person singular aorist. This seems however only to have been the case in an unstressed syllable, cf. *slā* < \**solā* but *brā* < \**bira*. The length may be due to the influence of other forms of the words, and theoretically it may go back to proto-Slavonic time, where certain contractional lengths also seem to have occurred in unstressed final syllables (cf. above). Old Czech 3rd person plural aorist *nesú*, *vedú* has probably been influenced by the form of the 3rd person plural present (Trávníček, op. cit. p. 249).

Genitive singulars in *-ē* of *ā*- and *īā*-stems in Serbo-Croat. and Slovene (cf. S.-Cr. *krāvē*, Slov. *gorē*) are obviously not old, as Slovene *līpe*, etc., show no metatony. It is consequently not our task here to explain how this lengthening arose.

In Slovian we find a number of surprising cases of old length in final *-i* and *-u*. If we study Lorentz's *Slowinzische Grammatik*, we shall find *-ī*, *ū*<sup>24</sup> in auslaut in (*o*-stems:) dat. sing. *xliuopī*, loc. sing. *vólū*, *kùōnū*, gen. sing. *břiegū*; (*īā*-stems:) dat. sing. *xiemjī*, nom.-acc. dual *xiemjī*; (*i*-stems:) dat. sing. *vūōsī*, loc. sing. *vūōsī*, nom.-acc. dual *vūōsī*. On the other hand we always find old short *-i* in the nom. pl. of *o*-stems: *xliuopji*. The impression one gets is rather confused. But Bubrich (*Северно-кашубская система ударения*) adduces dative *bīk<sup>u</sup>*: locative *krōlū*, dative *čelēsčē*: locative *čelēsčī*, dative *p<sup>u</sup>ò-nocē*: loc. *v<sup>u</sup>obnōcī*; nom.-acc. dual *nōcē*; *ā*-stem dat. *prācē*: locative *na-prācī*. This seems to make the picture somewhat clearer: lengthening originally occurred in the locative singulars in *-u* and the locative singulars in *-ī*, but not in dative singulars in *-u*, dat. singulars in *-i*, nom. plurals in *-i* in *o*-stems, duals in *-i* in *i*- and *īā*-stems. (In nom.-acc. pl. of *i*-stems we have *-e* from the *īā*-stems.)

This shows that *-i* and *-u* in auslaut were long in North-Kashubian in cases where in certain substantives, viz. the mobile, these endings were stressed. From these words lengthening also spread to words which are not mobile. In Slovian lengthening has also spread to a number of other case-forms in *-i* and *-u*, as it is clear that at a certain stage length was felt as characteristic of final *-i* and *-u*. The distribution of *-i*, *-ē*/*-ī*,



-u, -ě/-ū in Kashubian tells us therefore something about the ictus, thus supplementing what can be directly observed. At first sight it is of course strange that -i and -u should be lengthened under the influence of stress and not -ā, -ǣ, etc. This will probably have to be regarded as a reaction against shortening of those vowels that are by nature the shortest ones, in positions where these vowels played a grammatical role<sup>25</sup>.

Genitive sing. in ā-stems are among the forms which have final stress in the mobile type. Here we never find -ī (cf. *rābā, rāci, skrā*). I assume therefore that proto-Slav. *y* has not been lengthened. Thus the ending -ī in the instrumental plural probably goes back to an older-*y̆*. Cf. what we find in Slovene and Czecho-Slovak dialects. In the ending -mī length might be due to the end-stressed forms, cf. Slovene *možmī*. But \*-mī in Slovencian must have been replaced by \*-m̃y (-y from the o-stems), as we have *m* and not *mj* in front of *i* (cf. the adjective *mjīli*)<sup>26</sup>.

Thus, in Slovencian and Kashubian stressed -i and -u were lengthened. Lengthening in turn resulted in ictus being retained on these vowels.

The above observations will make it clear that I cannot support Bulachovskij's theory (Južnosl. fil. V, p. 88), that Indo-European diphthongs have preserved their length in final syllables in proto-Slavonic.

Other cases of length in absolute auslaut in Slavonic languages can easily be explained as contractions peculiar to separate languages or by the vowel concerned becoming a final vowel only secondarily. There is no need to deal with these cases here.

The preservation of length in disyllabic words in the syllable immediately preceding the stressed syllable is quite clearly a proto-Slavonic feature. Examples:

R. *mpaśá* : Serbo-Croat. *tráva*, Slov. *tráva*, Cz. *tráva*

R. *королѣ* : Serbo-Croat. *králja*, Slov. *králja*, Cz. *krále*, Pol. *króla*.

Exceptions in the separate languages can easily be explained as being due to the influence of forms with regular shortening in the language concerned. Thus in Polish we should expect \**rąka* : *rękę* corresponding to Russian *рукá* : *руку*. The vocalism of the root-stressed forms has gained the upper hand. In this connection I refer the reader to Vondrák, Vgl. Gr. I, p. 278; Rozwadowski, Gram. języka polskiego p. 82 f<sup>27</sup>; Trávníček, Hist. mluvnick p. 253.

It is possible to set up a number of different rules in the various Slavonic languages for the shortening and/or retention of proto-Slavonic

length in disyllabic and polysyllabic words. Some of these rules have such extensive application that it has been assumed that they obtained in proto-Slavonic. In certain positions the development in the separate languages presents a number of internal contradictions within the same language.

1. It is generally assumed that a stressed long vowel in the first syllable of polysyllabic words is shortened. I refer the reader to Vondrák op. cit., p. 274, Rozwadowski op. cit., p. 84, Trávníček op. cit., p. 250.

Ex. Ch. Slav. *jagoda*, R. *ягода*, S.-Cr. *jàgoda*, Slovencian *jāgoda*.

Ch. Slav. *mladostь*, R. *молодость*, S.-Cr. *mlādōst*, Cz. *mladost*.

Ch. Slav. *prase*, gen. *praseťe*, S.-Cr. *prāse* : *prāseta*.

Ch. Slav. *tysošta*, R. *тысяча*, S.-Cr. *tisuća*, Cz. *tisťc*, Slovencian *tāšinc*.

R. *свѣтлость*, S.-Cr. *svjētlōst* (besides *svijetao*), Cz. *světlost*.

Ch. Slav. *sěmę*, gen. *sēmene*, S.-Cr. (sjēme:) *sjēmene*, Cz. (síme:) *semene*.

Ch. Slav. *slaviti*, R. *славить*, S.-Cr. *slāviti*, Cz. *slaviti*.

Ch. Slav. *plakati*, R. *плакать*, S.-Cr. *plākati*, Cz. *plakati*.

We find agreement here between the languages which distinguish the old quantities. In Slovene, as we know, all stressed vowels (except *a*) outside the last syllable are long. Here we find *jāgoda*, (māti:) *mātere*, *mātica*, (sēme:) *sēmene*, *prāviti*, *gīniti*, *vidēti*, *vēdēti*, *plākati* but *lakāt*, *ravān sinōvi* (nom. pl.), etc. This suggests that the shortening of a long vowel in the first syllable, if it was really proto-Slavonic, has been accompanied by retention of the difference of intonation, viz. \**jāgoda*, \**mātere* but \**synove*, \**lākoti*.

2. Furthermore it is generally assumed that a proto-Slavonic shortening has taken place in syllables not immediately preceding the stressed syllable (cf. Vondrák, p. 274; Trávníček, p. 250; Rozwadowski, p. 84): \**teťivā*, R. *memuśá*, Štok. *tetiva*, Cz. *tětiva*; \**dalekō*, R. *далекó*, Štok. *daleko*, Cz. *daleko*.

3. In the syllable immediately preceding a stressed final syllable shortening has taken place in Czech in certain cases: *tětiva*, *tišina*, but on the other hand we have *devíti*, *desíti*, corresponding to R. *desjamú* *desjamú*. (Trávníček, p. 252). This case, too, is not absolutely clear. In Serbo-Croat. length has been preserved, e.g. in Štok. *tetiva*, Čak. *tetiva*, Čak. *rodilā*, *pobralā*, *skovānā*, *ženitē*. But admittedly we also find -ina in *bistrina*, *crnina*, etc.; in Čakavian, -inā, also occurs, cf. *starinā*, *slabinā* (Leskien, Gr. p. 170).

4. In the syllable immediately preceding a stressed inner syllable we find shortening, at any rate where the stressed syllable contains an originally long vowel (cf. Vondrák, p. 275, Trávníček, p. 251, Rozwadowski, p. 84). \**malina* : R. *малина*, Štok. *mālina*, Cz. *malina*, \**językō* : R. *язык*, Štok. *jèzik* (Gen. *jèzika*), Cz. *jazyk*, P. *język*.

In Czech by analogy long vowel occurs in the infinitive where the present has a long vowel as a result of neo-acute: Czech *táhnouti* from

*táhneš* (R. *тяну́* : *тянешь*, *тяну́ть*), *stoupiti* from *stoupíš* (R. *стуну́* : *стунушь*, *стуну́ть*), *kázati* from *kážeš* (R. *кажу́* : *кажешь*, *кажа́ть*).

The same thing has taken place in Polish, cf. *ciagnąć*, *glądać*, *sądzić*, *stąpić* from *ciagniesz*, *glądasz*, *sądzisz*, *stąpisz*. In Old Polish in the infinitive the short vowel was still to be found in contrast to the long in the present: *zēdać*, *sędzić*, *przystępić*. In Slovincian this contrast has been preserved: *skáućq* : *skākac*; *pjīšq* : *pjīšac*; *dīšq* : *dāχac* (cf. R. *дышу́* : *дышешь*, *дыха́ть*); *līžq* : *lāzac*; *kūpjq* : *kāpac*; *třīmā*, *třīmōš* : *třāmac*; *mlōucq* : *mlūecac*; *vārčq* : *vārcac* (cf. R. *ворочу́*, *ворочу́шь*, *ворочу́ть*).

In Serbo-Croatian the infinitive agrees with the present as far as quantity is concerned: *písati* : *pīšem*, *živjeti* : *živīm*, *kúpiti* : *kúpīm*. This may also be due to levelling. The type *trúbiti* : *trúbīm* and *živjeti* : *živīm* does not agree with the rule we have set up, as according to point 2 (or alternatively point 4) one would have expected a short root vowel. This needs to be explained.

5. Length in the third syllable from the end in front of stressed short vowel has been preserved: R. *naród* : Serbo-Croat. *národ*, Cz. *národ*; Serbo-Croat. *záhod*, Cz. *záchod*; Pol. *wądół*, Cz. *údol*; R. *молоде́жь*, Cz. *mládež*, Serbo-Croat. *mládež*. See Vondrák, p. 280, Trávníček p. 253.

As far as stressed vowels in internal syllables are concerned, they are generally considered to have been rising in proto-Slavonic, as circumflex-stressed vowel yielded its ictus to the preceding syllable. This doctrine must be considered as generally accepted. But is it right?

It is hardly possible to prove it directly. It is in principle possible to prove that ictus has been transferred from a syllable *a* to a syllable *b*, if one can observe two different stages in the development of the same language, in the elder of which one finds ictus on *a*, and in the more recent stage on *b*, or if there are cognate languages with stress on *a* and which may be assumed to have an older accentuation (cf. the Štokavian accentual retraction in relation to Čakavian and Russian). The first possibility of proving this thesis is not available as far as proto-Slavonic is concerned. Neither does the second possibility exist, as the languages which would here come into consideration — the Baltic — do not show series of words and forms with inner circumflex which can be compared with Slavonic words and forms historically identical with them and having a retracted stress.

We are therefore compelled to look for other criteria in Slavonic. Šachmatov (Izv. VI, p. 344 ff), who was probably the first scholar to formulate the theory, has adduced that in Russian only *-opó-*, *-epé-*, *-oló-* occurs in an inner syllable and never *-ópo-*, *-épe-*, *-ólo-*. But examples with *-opó-*, etc., for *-ópo-*, etc., in an inner syllable occur mainly in compounds,

cf. *zóród* : *ozóród*; *zóloto* : *pozólota*, and compound words often develop in a special way as far as intonation is concerned. This is known to us from Norwegian, e.g. in the dominant tendency to use «melody I» in compounds with an unstressed first component, even where the second component, when standing alone, has «melody II»: *piker* : *småpiker* (girls), *lære* (teach, learn) : *belære* (instruct), *dýre* (expensive, pl.) : *fordýre* (to render more expensive), *for dýre* «too expensive» (expressions of this kind have been treated as compounds), *tilbake*, older : *tilbake* (back), etc. Likewise the tendency to use «melody I» in compounds with three syllables in East Norwegian: *Øppegård* beside *Øppegård*, *hellefisk* beside *hellefisk* (halibut); *Øverland* beside *Øverland*, *I'ndrebø* beside *I'ndrebø*, or the modern East-Norwegian tendency in the direction of «melody I» in the first component of a disyllabic compound: *Stórtinget* for *Stórtinget*, *rå'dhus* for *rå'dhus* (town-hall), *iskrem* for *iskrem* (ice-cream), etc. All this applies solely to compounds.

Nor is it much help to point to retractions of the type *\*nà golvø* for *\*na golvø*. Interpersonal accentual relations, too, may frequently have their own rules, which do not allow us to draw any conclusions with regard to the development of accentuation inside the word. In this connection I might mention another example from Norwegian: East-Norwegian *gå' ut* (go out), *komme hjem* (come home), etc., as opposed to West-Norwegian *gå út*, *komme hjém*. Today we even hear *få' lov* for *få lóv* (be allowed).

No importance attaches to an example such as Russian *сковорода́* : *сковоро́ду*. Attempts have been made to trace it back to *\*skovořda*, *\*skovořdu*, of which the first form had the ictus moved forward by virtue of de Saussure's law, while the other retracted the ictus owing to internal circumflex. But de Saussure's law cannot be made to apply to Slavonic (see p. 19 ff): we are here face to face with an interchange of the type *Lietuvà* : *Lietuvq*. The same applies to the Russian *слобода́* : *слобо́ду*, *но́вeсть*, pl. *но́вeстм*, *новeстéй*, *новeстáм*, etc.<sup>28</sup>

Stressed inner circumflex occurs in Čakavian predominately in cases where we have grounds for regarding it as, or might suppose it to be, secondary: gen. pl. *kolēn* (Štok. *kōljēnā*); pres. *kupūjen* as opposed to Štok. *kūpujēm*; adj. *bogātī* (see page 32); *kopān*, *kopāš*, *kopāmo*, etc. (due to contraction; Štok. *kōpām*, *kōpāš*); the definite adjective *novōga*, etc. (due to contraction). Where in Čakavian a stressed inner or final vowel is not neoacute, it is as a rule short. But does this actually prove that this vowel was not originally circumflex (falling)?

In fact we have very little to go on, as far as the law of retraction is concerned.

In a number of cases which can be checked, ictus is retracted in the separate Slavonic languages (not always on the same lines), from a vowel

which has arisen by contraction of two vowels, the first of which had the original ictus, viz. where the contractional vowel may be assumed to have been a falling one. We find examples in the composite adjective forms, cf. Čak. *běloğa*, Russian *белого* from *\*bělāgo* < *\*bělajego*, etc., besides Čak. *běl*, *bělā*, *bělō*; in the contracted *ā*-verbs, cf. Čak. *pītās*, *pītā* (cf. Russian *пѣмѣшь*, *пѣмѣм*), Ugro-Russian (Ublja): *bydāyu*, *bývaš*, *bývat'*, *byvājemo* (Broch, *Угровское наречие села Ыбли*, p. 106); in the instr. sing. of the personal pronoun Čak. *tōbūn* (R. *тобѣю*), etc. Thus at the stage of the separate languages it is possible to note a tendency to let a newly-arisen inner-stressed falling vowel transfer its ictus to the preceding vowel.

In certain polysyllabic forms in proto-Slavonic ictus is placed on the syllable preceding the syllable which carries ictus in other (disyllabic and polysyllabic) forms of the same word (*\*būdiši* : *\*bud'ō* : *\*budīti*). A general comparison between the Slavonic and Baltic types of declension makes it improbable that de Saussure's law is applicable in Slavonic (p. 19 ff.). It must therefore be assumed that retraction from an inner syllable has taken place. The inner syllable has in most cases a long vowel, and in one case (the type *могъ* : *можешь*, *тогъ* : *тобеишь*) a short vowel. As far as the long vowel is concerned it is more probable that it had a circumflex than an acute, as certain Balto-Slavonic pairs such as Lith. *sėdėti*, *jiėškoti* : Russ. *сидѣть*, *искѣтъ*, Lith. *barzdotas* : Serbo-Croat. *bradat*, seem at any rate to preclude the possibility of a general retraction from the acute. Furthermore, as already mentioned, the separate Slavonic languages show a tendency to retraction from a newly-formed circumflex, and this tendency is more likely to have been a continuation of, than a contrast to, the retractive tendency which has operated at an earlier period. I believe therefore that it is probable that retraction from an inner circumflex has taken place. I find no examples which could prove the contrary.

As far as an inner short vowel is concerned, we have already seen that no general retraction has taken place, as we find many examples of stressed short vowels in inner syllables. The example indicating the opposite which I have mentioned (Russ. *могъ* : *можешь*, etc.), can be explained as a special development (see Chapter VII 2 b). Russian dialects and Slovene show that a stressed short vowel in an inner syllable was rising.

If a short stressed vowel in an inner syllable was rising at the proto-Slavonic stage, and retraction in certain cases took place from an inner stressed falling, long vowel, and there is nothing to disprove that retraction of this nature has taken place in all cases, it is on structural grounds reasonable to assume the latter, so that for the last stage of proto-Slavonic we only get rising vowels in an inner stressed syllable. I assume therefore that the non-neo-acute inner stressed long vowels were acute.

These vowels are shortened in the languages where free quantity has been preserved: O.R. *язык*, gen. *языка* : Serbo-Croat. *jèzik*, *jèzika*; Cz. *jazyk*; Slovincian *jāzek* (-āka)

R. *бесѣда* : Čak. *besēda*; Cz. *beseda*

R. *говѣдо* : Serbo-Croat. *gòvedo*; Cz. *hovado*

R. *лопѣта* : Serbo-Croat. *lòpata*; Cz. *lopata*; Slovincian *lùepata*

R. *корыто* : Serbo-Croat. *kòrito*; Cz. *koryto*; Slovincian *kùeräto*

R. *копыто* : Serbo-Croat. *kòpito*; Cz. *kopyto*; Slovincian *kùepäto*

R. *малина* : Serbo-Croat. *màlina*; Cz. *malina*

R. *судитъ* : Serbo-Croat. *sùditi*; Cz. *souditi* cf. Slovincian *činic*

R. *летѣтъ* : Serbo-Croat. *lètjeti*; Cz. *letěti* cf. Slovincian *siezec*

R. Imper. *пишѣте* : Čak. *pišite*; Slovincian *klipeji -jica*

The question of quantity in a post-tonic syllable in polysyllabic words presents greater difficulties (see Vondrák, p. 277 f; Trávníček, p. 252; Rozwadowski, p. 85).

We find in substantives with closed final syllable in the nom. sing. (without an apparent suffix):

R. *голубъ* S.-Cr. *gòlūb* Cz. *holub* Pol. *gołąb* (g. -ębia)

R. *жѣлудъ* S.-Cr. *žělūd* Cz. *žalud* Pol. *żołędź*

S.-Cr. *jāblān* (-āna) Cz. *jabloň* Pol. *jabłoń*

R. *лѣбедъ* S.-Cr. *lābūd* Cz. *labuť* Pol. *labędź*

R. *мѣсяцъ* S.-Cr. *mjěsēc* Cz. *měsíc* Pol. *miesiąc* (g. -ąca, g.pl. -ęcy)

R. *пѣнязь* S.-Cr. *pěnězi* Cz. *peníz* dat. pl. *penězům* Pol. *pieniądze* (g.pl. -ędzy)

R. *јастребъ* S.-Cr. *jāstrēb* Cz. *jeřáb* Pol. *jastrząb* (g. -ąba and -ębia)

R. *(пау)к* S.-Cr. *pāūk* Cz. *pavouk* Pol. *pająk* (g. -ąka)

S.-Cr. *jārēb* Cz. *jeřáb*

R. *заяцъ* Cz. *zajíc* Pol. *zajac* (g. -ąca, g.pl. -ęcy)

S.-Cr. *gāvran* (-āna) Cz. *havran* Pol. *gawron*

S.-Cr. *vītēz* Cz. *vitěz*

R. *(тыс)яга* S.-Cr. *(t)isūca* Cz. *tisíc* Pol. *tysiąc* (g.pl. *tysięcy*).

This shows that Serbo-Croatian regularly retains length in this type of word, while West Slavonic has retained it in certain words but not in others. In these circumstances the short vowel we find in Czech *holub*, *žalud*, etc., cannot be regarded as proto-Slavonic.

If we consider the words of this type which are provided with a productive suffix, we shall find that the picture is rather varied:

S.-Cr. *pěkār* (g. -āra) cf. *čuvār*, -āra Cz. *pekař*, *rybář*

S.-Cr. *ribnjāk* cf. *guščāk*, -āka Cz. *horák*

S.-Cr. *Sřbin* cf. *Turčin* Cz. *dvořenín*, *Rusín* (-ina)

S.-Cr. <i>kùsāl̥j</i>	cf. <i>četr̥tāl̥j</i> , - <i>āl̥ja</i>	
S.-Cr. <i>bjēlāš</i>	cf. <i>krilāš</i> , - <i>āša</i>	
S.-Cr. <i>čētnīk</i>	cf. <i>dūžnīk</i> , - <i>ika</i>	Cz. <i>rybník</i>
S.-Cr. <i>slādūn</i>	cf. <i>glādūn</i> , - <i>ūna</i>	Cz. <i>tahoun</i>
S.-Cr. <i>ōblīš</i>	cf. <i>glādīš</i> , - <i>īša</i>	
S.-Cr. <i>brātić</i>	cf. <i>krāljić</i>	Cz. <i>dědic</i> , <i>Štepanici</i>
S.-Cr. <i>cārīć</i>	cf. <i>grādīć</i> , - <i>īca</i>	
S.-Cr. <i>žūjān</i>	cf. <i>gūšān</i> , - <i>āna</i>	Cz. <i>velikán</i>
S.-Cr. <i>rōdāj</i> , - <i>āja</i>	Cz. <i>obyčej</i>	
S.-Cr. <i>čēljād</i> , <i>prāsād</i>	Cz. <i>čeled'</i>	
S.-Cr. <i>pōbjedl̥iv</i>	cf. <i>ljēniv</i>	Cz. <i>stydliový</i> , <i>hněvivý</i>
S.-Cr. <i>kōsmat</i>	cf. <i>bogat</i>	Cz. <i>bohat(y)</i>
S.-Cr. <i>cvjēst</i>	cf. <i>golūbast</i>	
S.-Cr. <i>gīzdav</i>	cf. <i>řdav</i>	Cz. <i>měňavý</i> , <i>laskav</i>
S.-Cr. <i>bābin</i>	cf. <i>snāhin</i>	Cz. <i>ženin</i>
S.-Cr. <i>plāmenit</i>	cf. <i>srdit</i>	Cz. <i>masitý</i>
S.-Cr. <i>vōštan</i>	} cf. <i>stāklen</i>	Cz. <i>voštěný</i>
S.-Cr. <i>plāmen</i> , - <i>ena</i>		Cz. <i>dřevěný</i>

(In the Czech examples I have not taken into account the question of proto-Slavonic ictus.)

On the whole we find a considerable measure of agreement between Czech and Serbo-Croatian, though Czech has a somewhat greater tendency to shorten. In Serbo-Croatian one form of each suffix seems to have been generalised, so that the stressed form has ousted the unstressed. For this reason we find shortening in post-tonic syllables, in such cases where the forms concerned have a counterpart of the same type of formation with the vowel of the suffix short and originally stressed (and in consequence originally acute):

*Sřbin* — *Türčin*, — cf. R. *лѣтин*, gen. -*ūna*  
*brātić* — *krāljić*

*pōbjedl̥iv* — *ljēniv* — cf. R. *ленів*, -*ūva*

*kōsmat* — *bogat* — cf. R. *богат*, -*āma*

*cvjēst* — *golūbast*

*gīzdav* — *řdav* — cf. R. *кровав*, -*āva*

*bābin* — *snāhin* — but R. *Ильин*, -*ūna*

*plāmenit* — *srdit* — cf. R. *сердит*, -*ūma*

It appears to be in formations which show a type with a fixed suffix stress besides a type with root-stress, that we find a short vowel. Otherwise the length seems to have been preserved in the post-tonic vowel.

Czech agrees fairly well with Serbo-Croatian, as can be seen from the above list. Exceptions are: *rōdāj*, -*āja* : *obyčej*

*čēljād* : *čeled'*

Curiously enough these are precisely the words in our list where in Serbo-Croatian we have no end-stressed or suffix-stressed pendant to the root-stressed forms with the suffix concerned. Maybe these words give an indication of the different tendency in the two languages (cf. also the contrast *gōlūb* : *holub*, etc.).

The contrast: Serbo-Croatian *Sřbin*, *Türčin* — Cz. *Rusín*, *dvořenín* is peculiar.

To the type we are here dealing with belongs the 3rd person plural present in \*-*ptb*, \*-*etb*, cf. Serbo-Croat. *pīšū*, *vidē*, Cz. *lezou*, *řeží*, *vidí*, Pol. *będq*, *piszą*, *widzą*.

Here, we must bear in mind that in the end-stressed types, *o*, *e* were bound to appear as long under a neo-acute. This length may have been generalised.

In the post-tonic suffixes whose vowel in the nominative singular M does not stand in a closed syllable in the separate languages, we also find a short vowel in some cases, and a long vowel in others:

Ch.-Sl. -*yñi* : S.-Cr. *Gřkinja* cf. *kněginja* — Cz. *bohyně* —

Slovincian *gospodāna*

Ch.-Sl. -*ica* : S.-Cr. *mātica* cf. *sēstrica* — Cz. *hlavice*

Ch.-Sl. -*mica* : S.-Cr. *nōžnica* cf. *strážnica* — Cz. *lednice* — Sl. *gřēžnica*

Ch.-Sl. -*ište* : S.-Cr. *blātište* cf. *črkvište*, *lōvište* — Cz. *pastviště*

Ch.-Sl. -*anin* : S.-Cr. *grādanin* cf. *dvōranin*, -*ani* — Cz. *dvořenín* —

Sl. nom pl. *mjēščounā*, -*anā*

Ch.-Sl. -*ača* : S.-Cr. *krāvjača* cf. *kisēljača*

Ch.-Sl. -*ina* : S.-Cr. *grāšina* cf. *slānina* — Cz. *rostlina*

— Sl. *bābjina*, *celācāna*

Ch.-Sl. -*ivo* : S.-Cr. *jāgnjivo* cf. pl. *sječiva* — Cz. *palivo*

Ch.-Sl. -*anije*, -*ēnije* : S.-Cr. *glēdānje* cf. *vjenčānje*, (Čak.) *imānje* —

Cz. *hledání*, *vidění* — Sl. *kāzāne*

Ch.-Sl. -*et* etc. : S.-Cr. *ždrēbeta* cf. *djeteta* — Cz. gen. *kuřete* — Sl. *celāta*

Ch.-Sl. -*ilo* -*alo* : S.-Cr. *glādilo* cf. *bjēlilo* — Cz. *bělilo* — Sl. *strāšādlo*

S.-Cr. *šibalo* cf. *kūpalo* — Cz. *kupadlo* — Sl. *gřiebadlo*

The suffixes -*anije*, -*ēnije* are in a class apart, and present certain complications. We shall deal with them later on. Otherwise one gets the impression that in Serbo-Croatian the short vowel form triumphs, but it should be observed that side by side with the root-stressed form we also have a suffix-stressed form, where a short vowel would be expected in every case. Consequently this group can be regarded from the same angle as the preceding one. In words in -*ivo*, where the suffix-stressed type does not occur, we can see a phonetic development, but we can also envisage the possibility that *i* may have been preserved owing to originally end-stressed plural forms, cf. *sječiva* and the like. An exception to our

rules is provided in part by formations in *-ište* designating «place.» Here we often find a long vowel with the old stress. This of course runs counter to what we have so far been able to lay down with regard to the quantity of stressed internal vowels. But Čakavian *gnojšće*<sup>29</sup> is completely regular, and in common with Leskien (Gr. p. 170) we may assume that the root-stressed type in this case has influenced the suffix-stressed type, contrary to what we find in other cases.

Leskien, Gr. p. 161, is probably right in explaining as phonetically regular the opposition *myěščani, grādāni : křščani, dvōrani*.<sup>30</sup>

In Czech we find shortening all the way.

Finally, a few words on quantity in endings.

By endings in this connection I mean syllables which occur as endings from the Slavonic point of view, irrespective of whether from the Indo-European point of view they appear as thematic vowels plus endings or as suffix vowels plus endings.

In the noun declensions we find proto-Slavonic long vowel in the endings of the locative plural of *o*-stems, dat., instr., loc. pl. and dat.-instr. dual of *ā*-stems. (In absolute auslaut a long vowel is shortened. The exceptions which can be traced here have been dealt with above page 41 ff). We find the following forms in the languages which show difference in quantity:

	Čakavian (Novi)	Slovene
<i>o</i> -stems Loc. Pl.	<i>čāsīh — brođīh</i>	<i>rākih — možēh</i>
<i>ā</i> -stems Dat. Pl.	<i>krāvān — ženān</i>	<i>līpam — gorām</i>
» Instr. Pl.	<i>krāvami — ženāmi</i>	<i>līpami — gorāmi</i>
» Loc. Pl.	<i>krāvah — ženāh</i>	<i>līpah — gorāh</i>
» Dat. Instr. Dual		<i>līpama — gorāma</i>
	Czech	Slovincian
<i>o</i> -stems Loc. Pl.	<i>hadīch — klīčīch</i>	<i>xlūopjēx'</i>
<i>ā</i> -stems Dat. Pl.	<i>ženām</i>	<i>rāboum</i>
» Instr. Pl.	<i>ženami</i>	<i>rābamī</i>
» Loc. Pl.	<i>ženách</i>	<i>rābaχ</i>
» Dat. Instr. Dual		<i>rābouma</i>

Apart from cases which may be due to secondary lengthening, such as the lengthening in front of the nasal in Čakavian *ženān*, Slovincian length in *rāboum, rābouma*, or the neo-circumflex vowels in Slovene *gorāmi, gorāma*, the state of things is as follows: in the locative plural of *o*-stems the *ē* is long. In *ā*-stems we find a short *a*, apart from the above-mentioned case and Czech *ženām, ženách*. These Czech forms are not clear. Their length can hardly originate in forms where *a* was stressed.

In no language do we find any difference between words based on their accentual type (root-stressed, end-stressed and mobile).

In the adjectival declension we find in S.-Cr. *-ijem(a), -ijeh*. These forms derive from the pronominal declension. The *ē* is long as in the noun ending *-ēxx*.

In the conjugation of the present the *i*-verbs originally showed a long vowel in all endings. In the imperative an originally long vowel *i* (*ē*) occurred in all classes of verbs. In the separate languages which have preserved the differences of quantity we find the following forms:

	Čakavian (Novi)	Czech	Slovene	Slovincian
<i>i</i> -stems	<i>ženīn želīn</i>	<i>mluvīm</i>	<i>podīm mīslīm</i>	<i>čīnq</i>
	<i>ženīš želiš</i>	<i>mluviš</i>	<i>podīš mīslīš</i>	<i>čīnīš</i>
	<i>ženī želi</i>	<i>mluvi</i>	<i>podī mīslī</i>	<i>čīnī</i>
	<i>ženīmo želimō</i>	<i>mluvīme</i>	<i>podīmo mīslīmo</i>	<i>čīnīmā</i>
	<i>ženīte želitē</i>	<i>mluvīte</i>	<i>podīte mīslīte</i>	<i>čīnīcā</i>
	<i>ženē želē</i>	<i>mluvi</i>	<i>podē</i>	<i>čīnou</i>
thematic stem				
3 p.pl.	<i>pekū pīsū</i>	<i>nesou řezī</i>	<i>pletō</i>	<i>plūotou</i>
Imperative	<i>ženī</i>	<i>mluv(-i-ž)</i>	<i>-pōdi mīslī</i>	<i>čīnī</i>
	<i>ženīte</i>	<i>mluvte</i>	<i>podīte mīslīte</i>	<i>čīnīcā</i>
	<i>pečī gīni</i>	<i>nes(-i-ž)</i>	<i>cvātī plēti</i>	<i>plīecā</i>
	<i>pečīte gīnite</i>	<i>neste</i>	<i>cvātīte pletīte</i>	<i>plecācā</i>

The languages which provide information on this point all show without exception long vowel in the present form, short vowel in the imperative.

Likewise we find length in all languages in the contracted *ā*-verbs: Čak. *pītāš — kopāš*, Slov. *dēlaš — končāš*, Czech *dělāš*, Slovincian *třīmōš*

Among the infinite verb-forms we shall first consider the infinitive:

	Čakavian (Novi)	Slovene	Czech	Slovincian
*-ati:	<i>brīsat — pīsāt</i>	<i>dēlati</i>	<i>řezati</i>	<i>pīsac</i>
*-ēti:	<i>vidīt [Štok. vīdjeti]</i>	<i>videti</i>	<i>trpēti</i>	<i>stāřec</i>
*-iti:	<i>rānīt — pālīt</i>	<i>mīsliti</i>	<i>mluviti</i>	<i>čīnic</i>
*-nōti:	<i>gīnūt — adahnūt</i>	<i>(vēniti)</i>	<i>vinouti</i>	<i>cīgnouc</i>
				[Pol. <i>ciagnąć</i> ]

We find a short vowel everywhere except in the infinitive in *-nōti*, where in Čakavian we regularly have *ū* in a stressed syllable, while in the post-tonic syllable length has been preserved as in so many other cases in Serbo-Croatian. In West Slavonic too the long vowel predo-

minates in infinitives in *-nōti*. In Montenegrin dialects we find *pitāt* : *pādāt*, *vrišnūt* : *gīnūt*, *vidijet* (see Rešetar, *Betonung süd-westlicher Mundarten*, p. 159, and Leskien, *Gr.* p. 572).

Let us now proceed to the *-l-* participles:

	Čakavian (Novi <sup>31</sup> )	Slovene	Czech	Slovincian
1. Root-stressed present:	<i>brīšāl, -ala</i>	<i>dēlal, -ala, -alo</i>	<i>řezal</i>	Common pattern: <i>slynul dieptoul, -ā, dieptalo</i>
	<i>gīnūl, -ūla</i>	<i>(zvē)nil, -ila, -ilo</i>	<i>slynul</i>	
	<i>vōlēl, -ela</i>	<i>videl, -ela, -elo</i>	<i>viděl</i>	<i>cīgnoun, -nā, -nanō</i>
	<i>srītil, -ila</i>	<i>mīslil, -ila, -ilo</i>	<i>čistil</i>	<i>vjīzoul, -a, -alo</i>
2. Recessive present:	<i>pīšāl, -āla</i>	<i>česal, -āla, -ālo</i>	<i>kazal</i>	<i>činēl, -ila, -ilo</i>
	<i>odahnūl, -ūla</i>	<i>(krē)nil, -ila, -ilo</i>	<i>tonul</i>	
	<i>ženil, -ila</i>	<i>mōtil, -ila, -ilo</i>	<i>nosil</i>	
3. End-stressed present:	<i>ōprāl, -ālā</i>	<i>kovāl, āla, -ālo</i>	<i>koval</i>	
	<i>žēlēl, -ēla</i>	<i>žēlēl, -ēla, ēlo</i>	<i>trpěl</i>	
	<i>rōdīl, -ilā</i>	<i>gostīl, -ila, -ilo</i>	<i>hradil</i>	

In Čakavian the suffix vowel is short when stressed (i.e. in group 2 and in *ē*-verbs in group 3). In group 3 the *a-* and *i-* verbs show alternation of stress between the first and last syllable, skipping the medial syllables. Thus, here the *-i-* and *-a-* are never stressed, but always either pre-tonic or post-tonic. In both cases length has been retained. In group 1 verbs in *-nōti* have retained length in a post-tonic position, while the *a-* and *i-* verbs have a short *a* and *i* respectively.

In Slovene quantity can now only be checked indirectly. But the lack of circumflexion in the root syllable shows that post-tonic *-a-*, *-ē-*, *-i-* were short. In the same way retraction in the nom. sing. M. in *česal*, *mōtil*, *krēnil*, *žēlēl* indicates the same short vowel in these types as in Čakavian. It is impossible to say anything about *kovāl*, *gostīl*. There is nothing to suggest, however, that the quantity here was different from what it was in Čakavian. Czech has a short vowel throughout. The same applies to Slovincian. Polish (*ciagnął*;) *ciagnęła* agrees with Slovincian (*cīgnoun*;) *cīgnā*.

Let us now consider the perfect participle passive<sup>32</sup>.

	Čakavian (Novi)	Slovene	Czech
1. Root-stressed present:	<i>brīšān, -āna</i>	<i>zdēlan - končān</i>	<i>řezān, -āna</i>
	(Štok.) <i>dīgnūt, -ūta</i>		<i>vinut</i>
	(Štok.) <i>vidēn?</i>	<i>viden</i>	<i>viděn</i>
2. Recessive present:	<i>pīšāna</i>	<i>pīsan</i>	<i>tesān</i>
	(Štok.) <i>krēnūt</i>	<i>česān</i>	
3. End-stressed present:	<i>ōprān, -prānā</i>	<i>kovān</i>	

In Serbo-Croat. we never find a stressed vowel in the suffix and never

a short vowel (Štokavian *vidēn* may have borrowed the form of the *i*-stem). Slovene *zdēlan*, *viden* suggests a long vowel in the suffix. In Czech *-an* also has a long vowel throughout, while *-ut-* has a short vowel.

In the present participle active *o*, *e* before *\*l* are represented by length in all languages where the quantity can be determined:

Čakavian: (Novi)	<i>trēsūc, brīsūc, pīšūc, želēc, pālēc.</i>
Czech:	<i>nesouc, řezíc, trpíc.</i>
Slovincian:	<i>plētōučā, klēpjōučā, sežōučā.</i>

As far as Serbo-Croatian is concerned the question of the retention or shortening of length in final syllables in grammatical forms appears to be comparatively clear:

a) In stressed syllable non-neo-acute length (originally undoubtedly acute, see above p. 48) is shortened: Čak. dat. loc. pl. *ženāmi, ženāh*, imper. *ženī, ženīte*, inf. *pīsāt, pālīt, odahnūt*, *l*-participle *pīsāla, ženīla, odahnūla, želēla*.

b) In pre- and post-tonic syllables length has been preserved if the vowel in question does not occur as stressed and short in other forms of the same category. In this case the short vowel may be generalised. Viz.:

1. Loc. pl. *čāsīh* (short-stressed vowel does not occur in this category. When stressed, the vowel of this ending is neo-acute and therefore long: *brodīh*); the present form of the *i*-verbs: *ženī, ženē* (the end-stressed pendant has a neo-acute: *želīš, -ī*); perfect participle passive: *brīšāna, pīšāna, ōprān* : *oprānā* (*a* is never stressed); present participle active: *brīsūc, pālēc* (the end-stressed forms have a long neo-acute vowel: *trēsūc, želēc*).

2. Imperative: (*brīši*;) *brīšite*; (*gīni*;) *gīnite* after (*ženī*;) *ženīte*; infinitive *brīsat, rānit, vīdit* (Štok. *vīdjeti*) after *pīsāt, pālīt*, etc.; the *l*-participle *brīsala, srītīla* after *pīsāla, ženīla*.

3. Čakavian has *gīnūt* despite *odahnūt* and *gīnūla* despite *odahnūla*. Furthermore we find *ōprāl - oprālā, rōdīl - rodīlā* despite *pīsāla, ženīla*. Here the mobile accent may have helped to preserve the old length. In Štokavian we find *dīgnuti* in the same way as *tōnuti, gīnuo, -ula* in the same way as *tōnuo, -ula*.

In Slovene all stressed vowels outside the final syllable are in principle long, and the unstressed short. Thus it is only indirectly — owing to secondary circumflex in the preceding syllable — that we can say anything about the original length of the final vowel. Here the pattern agrees very closely with Serbo-Croatian (verbal forms with *-no-* < *-nō-* are, however, lacking in the literary language). Thus we find:

1. *līpam, līpami, līpah; mīslī, mīslīte; dēlati, vīdeti, mīslīti; dēlal, mīslīl, vīdel.*

## 2. *râkih; mîslîš, mîslî . . ; zdělan.*

In Czech the situation is somewhat different: Instr. pl. *ženami* agrees with Serbo-Croatian and Slovene, but the forms *ženám, ženách* do not. In the infinitive the short form has gained the upper hand in Czech, apart from *-nouti* (cf. Polish *-nąć*), which has preserved its length here as in Čakavian. In the imperative the vowel is short, and so it is in the *l*-participles. In the present of the *i*-verbs, in the participles in *-án-* and in the present participle we find the long vowel, but not in *viděn* and in the perf. part. passive in *-nut*.

One gets the impression, however, that in Czech, too, post-tonic (and pre-tonic) long vowel has been phonetically preserved in the endings, but that the generalisation of one type of quantity in each type of flexion has followed somewhat different lines from Serbo-Croatian and Slovene.

If we consider all the types of post-tonic elements of compounds, suffixes and endings as a whole, the state of affairs prevailing in Czech is difficult to explain: the shortening in *holub, žalud, pamět, čeled', ženami* as opposed to *ženám, ženách* presents certain difficulties.

Thus in the chapter on accent and quantity we have seen that in a number of cases old long vowels have been shortened in the Slavonic languages; in one single case — long vowel in inner syllable with old acute intonation — we find a short vowel in all the Slavonic languages where free quantity has been preserved.

But to what extent do these and other shortenings go back to proto-Slavonic, i.e. to the essentially pre-dialect stage?<sup>33</sup> Among Slavonic scholars it has generally been accepted that some of the shortenings are proto-Slavonic. But which, is a question on which opinions have been divided.

One thing, however, is definite:

In the older Lithuanian and Latvian loan-words from the Slavonic languages quantity does not agree with what we should have expected if the Slavonic words had passed through one or several of the shortenings mentioned in this chapter. On the contrary, it agrees with the picture we can form of the proto-Slavonic quantity before these shortenings took place; *a, ě, y, i, u, o, e* are rendered by long vowels regardless of their position in the word, and *o, e, ь, ъ* are represented by short vowels irrespective of their position in the word. The same applies to the Old Russian words in Finnish. Examples:

### 1. In disyllabic words:

Lith. *bliūdas*, Lat. *bl'uōda* < R. *блѹдо* (cf. S.-Cr. *bljūdo*).

Lith. *knygà* (gen. *knỹgos*) < R. *кнѹга* (cf. S.-Cr. *knjga*).

Lith. *sūdas*, Lat. *sūods* < R. *судѡ* (cf. Čak. *súd*).

Lith. *griėkas*, Lat. *grėks* < R. *грѣхъ* or Pol. *grzech* (S.-Cr. *grjeh*, originally neo-acute).

Lith. *rėdas* < R. *рѣдѡ* (cf. S.-Cr. *rěd*).

Lith. *blūdas* < *блудѡ* (cf. S.-Cr. *blūd*).

Lith. *pỹvas* < R. *nũso* (cf. S.-Cr. *pivo*).

### 2. In the stressed syllable of a polysyllabic word:

a) Lith. *grōmata*, Lat. *grāmata*, Est. *raamat* < R. *грѣмѡма*.

Lith. *mūčyti*, Lat. *muōcīt* < R. *мѹчимъ*.

Lith. *mōčeka*, < R. *мѡчеха*.

Lith. *bōvytis*, Lat. *bāvīties* < R. *бѡвѣтъся* (and Pol. *bawić się*?), cf. S.-Cr. *bāviti se*.

b) Lith. *bagōtas*, Lat. *bagāts* < R. *богѡтѡу* (and Pol. *bogaty*?), cf. S.-Cr. *bogat*.

Lith. *susiėdas* < R. *сѹсѣдѡ* (Mod. R. *cocěd*).

Old Lith. *besieda* < R. *бесѣда*, (cf. S.-Cr. *běsjeda*).

### 3. In pretonic syllable in polysyllabic words:

Lith. *redyti*, Lat. *rėdīt* < R. *рѣдѣтъ*.

Lith. *zopāgas*, Lat. *zābaks*, Fin. *saapas*, Est. *sābas* < R. *занѡгѡ*.

Lith. *pyrāgas*, Lat. *pīrags*, Fin. *pīiras*, *pīirakka*, Est. *pīirag* < R. *пѹрѡгѡ*.

Lith. *sūdyti*, Lat. *sūodīt* < R. *сѹдѣтъ*.

Lith. *pūstyti*, Lat. *pūstīt* < R. *пѹстѣтъ*.

(Lith. *rubėzius*), Lat. *rūobeža* < R. *рубѣжъ*.

Latv. *zivats*, Karel. *siivatta* < R. *живѡтъ*.

### 4. In post-tonic syllables in polysyllabic words:

Lith. *zėrkolas* (*zėrkolas*) < R. *зѣркало*.

Latv. *pavārs* < R. *пѡварѡ*.

In a great many cases we find a short vowel: cf. Lith. *ātpuskas* < R. *ѡтпѹскѡ*, *kisėlius* < *кисѣль*, *mīslyti* < *мѣслѣтъ*, *pāduška* < *подѣшка*, *ūbagas* < *убѡгѡу* or Pol. *ubogi*, *šūtas* < *шѹтъ*, Latv. *bagatirs* < *богатѣрь*, *rublis* < *рубль*, etc. But there is every reason to assume that the latter represent a more recent stratum of loan-words, as the phenomenon can easily be explained on the grounds that the difference in length later disappeared in the languages from which the words were borrowed.

The question may of course be raised, whether in fact it really was the Slavonic quantity which decided the quantity in the loan-words in Lithuanian, Latvian and Finnish. It might, e.g., be possible that Russian *e* has been reproduced by Lith. *e*, Latvian *e*, Finnish *ä* (*e*), and Russian *ѣ* by Lith. *ie*, Latvian *ē*, Finnish *ä*, *ie* because they were closest to these sounds in quality, while quantity was the same in *ѣ* and *ѣ*. But if this were so it would be strange for all the originally long Slavonic vowels to have been constantly reproduced by long vowels in the borrowing



languages, and for all the originally short ones to be reproduced by short ones.

It might of course be possible that *a*, *ě*, *i*, *y*, *u* in Russian were more tense than Lithuanian, Latvian, Finnish *a*, *e*, *i*, *u*, viz. that a common feature existed in the originally long vowels in Russian (and possibly Polish), which might have been preserved also in their subsequent shortened form. According to Broch's description (Slav. Phonetik, p. 167 ff) in modern Great Russian *i*, *y* and *u* have a tense and untense variant, while *e* and *o* are lax vowels. In the case of *a* he has no remarks on tenseness.

Nevertheless I do not consider that this is the most probable explanation.

In the first place it is less probable that a short Russian *a*, owing to its greater tension, should be felt to be closer to Finnish and Latvian (Lith.) *ā* than to Finnish and Latvian short *a*. However, a single element in the vowel series is not decisive. If the other vowels were so tense that they were best rendered by long vowels in the borrowing languages, the *a* sound might be expected to follow suit. But there are other factors involved.

In the older Finnish loan-words Old Russian *ě* generally appears as long *ā*: Finnish *määrä* < *мѣра*, East Finnish *läävä* < *хлѣвъ*, Carel. *reähka* < *рѣхъ*. In more recent loan-words Russian *ѣ* appears as *ie*. (Mikkola, Die älteren Berührungen zwischen Ostseefinnisch und Russisch 2<sup>nd</sup> ed., p. 30). But the Russian short *e* also seems to have been an open sound. In the oldest Finnish loan-words it appears as *ā*: East Fin. *värttänä* < \**вертено*, (> *вертено*), *pätsi* < *печь*, Est. *nädal* < *недѣля* (cf. Mikkola, op. cit., p. 22). There are good grounds for interpreting *ē* < *ѣ* in the Latvian loan-words too as a rendering of an open pronunciation of *ě*, while Latvian *ie* and Lith. *ie* may represent a more recent and more closed pronunciation of *ě*. It is probable that *ě*, in the Russian dialects from which the oldest Finnish and Latvian loan-words were taken, had an open pronunciation (cf. Kiparsky FUF XXIX, p. 76 ff). It is doubtful whether this open *ē*-sound, after being shortened, could differ sufficiently from the old open *e* to condition a different reproduction in the loan-words.

It might of course be conceivable that in the languages from which the borrowings were made, at the time when the borrowings commenced, a long vowel was sometimes retained as long and sometimes shortened, but that the long form of the vowel was regarded by the borrowing language as its prototype, and therefore used to reproduce any and every *a*, *ě*, *i*, *y*, *u* in Slavonic words. But this explanation cannot be said to be psychologically the most probable. That the proto-Slavonic long vowels, when reproduced in loan-words, should show length, seems to reflect an actual state of the source

language at the time when borrowing commenced<sup>34</sup>. Subsequently a definite tradition has undoubtedly been established with regard to the reproduction of Russian or Polish vowels in Baltic and Finnish. It is possible that the actual basis of this reproduction is older than the Polish loan-words in Lithuanian, and that the vocalic length in Polish loan-words is reproduced according to principles which had already been established in the case of Russian loan-words. It should, however, be remembered that, in the old Prussian loan-words, which may be assumed to derive mainly from Polish (Lekhite), we also find proto-Slavonic lengths appearing as lengths:

	Pol.	Cf. Serbo-Croat.
<i>dilas</i> (gen.)	<i>dzielo, dzialo</i>	<i>djělo</i>
<i>dūsin</i> (acc.)	<i>dusza</i>	<i>dūša</i> (acc. <i>dūšu</i> )
<i>grikas</i> (gen.)	<i>grzech</i>	<i>griječ</i> (gen. <i>grijeħa</i> ) [old neo-acute]
<i>rūkai</i>	<i>rucho</i>	
<i>salūban</i>	<i>ślub</i>	
<i>skrišin</i>	<i>krzyż</i>	<i>krīž</i> (gen. <i>krīža</i> ), Cz. <i>kříž</i>
<i>swītas</i> (gen.)	<i>swiat</i>	<i>svijet</i> , Cz. <i>svět</i>

In Old Prussian, however, quantity has not been noted in an unstressed syllable.

At any rate, it seems fairly clear that at a later stage the transposition took place according to purely traditional rules, so that e.g. Slavonic *o* was reproduced by *a*, Slavonic *a* by *o* in Lithuanian loan-words, without any regard to the quantity of the word in its original form, cf. e.g. *Ona* < *Anna*, Old Lith. *notura* (Szyrwid) < Pol. *natura*, etc.

But if at the same time as streams of Russian loan-words began to be taken up by Finnish, Latvian and Lithuanian, the old lengths were preserved in all positions, is it in fact at all possible to speak of a proto-Slavonic shortening?

In the older Russian loan-words in Lithuanian, as we have said, proto-Slavonic length is reproduced by length independently of intonation or the position in the word. In these loan-words we find hardly any examples of a nasal vowel being preserved. On the other hand we find many words with *ū* for Russian *y* < *ѣ*, with *ė* for Russian *я* < *ѣ*, e.g. *sūdas* < *цѣдъ*, *rėdas* < *рѣдъ*. There are consequently reasons for believing that borrowings in these regions started in earnest at a time when *ѣ* and *ѣ* in the Russian dialects concerned had already developed into *y*, *я* and that the traditional way of reproducing Russian sounds in Lithuanian dates from this time. It is hardly possible to recognise as proto-Slavonic a stage of the language where this sound-change has been carried through.



## IV. NOUN DECLENSION.

I shall now proceed to a new section of my thesis, in which I shall attempt to investigate the part played by accent in declension. I shall consider here the different grammatical categories, and try to establish their proto-Slavonic accentuation, and relate this to Baltic.

The *ā*-stems

I shall start with this category, as it seems to me to provide the clearest picture, and should therefore provide the best basis for a continued study of noun declension.

From the point of view of accent, we have the following three types which can be found in those Slavonic languages that have preserved a free accent: (a) constant root-stress; (b) constant end-stress; (c) mobile stress.

## (a) Constant root-stress

The ictus vowel has acute intonation apart from the genitive plural. Exceptions are a group of words in *-iā* with a neo-acute root-vowel.

Type *a* is also to be found in Lithuanian, but here the root-vowel can also be circumflex. In this case de Saussure's law applies, so that the stress is placed on the ending where this was acute. In Slavonic this last-mentioned type seems by analogy to have been transferred to the mobile, cf. Russ. *рукá*, gen. *рукí*, acc. *ру́ку*; Serbo-Croat. *ruká*, *ruke*, *rukú* < proto-Slov. *\*røkà*, *\*røkỳ*, *\*røkq* besides Lith. *rankà*, *raĩkos*, *raĩkq*. The root-stressed forms probably formed the basis for the process of analogy. The reason may have been that after the type *\*golvà*, *\*gòlvq* had been changed by analogy to *\*golvà*, *\*golvq*, the principle of root-stress: rising tone — mobility: falling tone had been carried through except in this special case.

As examples of constant root-stress may be mentioned:

Russ.	Čak. (Novi)	Slov.	Slovinc.	Lith.
коро́ва	kràva	lìpa	rāba	stìrna
коро́вы	kràvë	lìpe	rābā	stìrnos
коро́ве	kràvi	lìpi	rābjā	stìrnai
коро́ву	kràvu	lìpo	rābq	stìrnq
коро́вою	kràvūn	lìpo <sup>36</sup>	rābou	stìrna
коро́ве	kràvi	lìpi	rābjā	stìrnoje
коро́вы	kràve	lìpe	rābā	stìrnos
коро́в <sup>35</sup>	krāv	lìp	rīb <sup>37</sup>	stìrnq
коро́вам	krāvān	lìpam	rāboum	stìrnoms

(коро́в)	krāve	lìpe	rābā	stìrnās
коро́вами	krāvami	lìpami	rābamī	stìrnomis
коро́вах	krāvah	lìpah	rābah	stìrnose

With regard to retraction in the genitive plural, Štok. *lōpātā*, Old Bulgarian *лѡдинъ, смѡтинъ*, see p. 28 f.

A special group is formed by the type *\*vòl'ā*, *\*súsā* with a neo-acute root-vowel. Examples:

- \*vòl'ā*: R. *во́ля*, (dial.) *воля*, Slov. *vòlja*, S.-Cr. *vòlja*, Slovincian *vùlā*, O. Pol. *wolā*, Č. *vùle*.  
*\*kòžā*: R. *ко́жа* (dial. *коѡжа*), Slov. *kòža*, S.-Cr. *kòža*, Cz. *kůže*.  
*\*nòšā*: R. *но́ша*, Slov. *nòša*, Cz. *núše*.  
*\*tēžā*: Slov. *tēža*, Čak. *tēža*, Cz. *tíže*, Pol. *cięża*.  
*\*žéd'ā*: Slov. *žēja*, Čak. *žēda*, O. Cz. *žieze*, O. Pol. *ządza*, Pol. *ządza*.  
*\*súsā*: R. *су́ша*, Čak. *súša*, Cz. *souš(e)*.  
*\*górd'ā*: R. *гopóжа*, Slov. *grāja*, Cz. *hráz(e)*, Pol. dial. *gródza*.  
*\*stóržā*: R. *cтopóжа*, Čak. *stráža*, Cz. *stráž(e)*, O. Pol. *stróžā*, Pol. *stróža*.  
*\*gòst'ā*: R. *гýща*, Slov. *gòšča*, Cz. *houšt(e)*.  
*\*vònā*: Slov. *vònja*, Cz. *vùně*, O. Pol. *woniā* (but S.-Cr. *vònja*).  
*\*dòl'ā*: R. *до́ля*, (dial.) *доля*, O. Pol. *dolā*, Pol. *dola*.  
*\*stèl'ā*: Slov. *stèlja*, S.-Cr. *stèlja*.  
*\*kèrm'ā*: R. *ко́рмля*, O. Pol. *karmiā*, Pol. *karmia*.  
*\*kúp'ā*: R. *ку́пля*, S.-Cr. *kùplja*, Cz. *koupě*, O. Pol. *kupiā*, Pol. *kupia*.  
*\*lòv'ā*: R. *ло́вля*, (dial.) *ловля*, Slov. *lòvlja*, etc.

These words have been the subject of much discussion, cf. especially Vondrák I. 229 ff.

Van Wijk has maintained (e.g. Akzentsysteme p. 102) that it is a change in the syllabic limit, e.g. *\*vol-ja* > *\*vo-lja*, which causes metatony. The fact that a number of words have remained unaffected by this change, e.g. R. *земля*, *дымá*, etc., is a forceful argument against this theory.

Vaillant's explanation in Meillet, Le slave commun 2<sup>nd</sup> ed. p. 183. f, is more plausible. He is of the opinion that those of our examples which are derivatives from verbs are formed from the recessive present forms (2<sup>nd</sup> and 3<sup>rd</sup> pers. sing.; dual and plural): *\*górd'ā* (Čak. *grāja*, R. *гopóжа*, etc.) should be derived from *\*górdiši*, etc. (Čak. *grádīš*, R. *гopóдишы*), *\*vòl'ā* from the verb *voliti* (Štok. *vòlim*), etc. I am willing to admit that the type we are here dealing with was at a certain stage felt as being in some cases derived from verbs with a recessive present, and that a number of more recent formations in various languages, in fact possibly already at the

proto-Slavonic stage, are derived as Vaillant suggests. But this explanation cannot apply to the whole group: by no means all the words are derived from verbs. A word like *koša* cannot be explained in this way. Vaillant suggests that this word owes its stress to the influence of its synonym, Polish *skóra*, but this word has a special Polish lengthening in the first syllable, such as e.g. *wolā* > *wola* does not have, and its original place of ictus is unknown. Furthermore, we find a group of words derived from adjectives: Russian *цýяа, цýяа*, Čak. *súša*, Slov. *gôšta*, etc. Here the possibility exists of derivation from the definite form with neo-acute: cf. Štok. *súhi*, Čak. *gústī*. But the decisive argument against the explanation is that it takes into account only one of the peculiarities bound up with these words, viz. their accent, while it does not take into account the other peculiarity: the long final vowel in Lekhite. On this point Łoś has proved more perspicacious, as he maintains (Zbornik Jagića, 1908, p. 334 ff) that long final vowel in Lekhite corresponds to root-stress in Russian and South Slavonic, short final vowel in Lekhite to end-stress (in the nominative): Old Polish *duśa*, acc. *duśe*, Russian *душа́*; *ziemia*, acc. *ziemie*: Russian *земля́*; O. Pol. *wolā, wolq*: Russian *воля́*. This however is merely an external description of the state of affairs, and not an explanation of it.

In the general section of this work I have tried to explain the phenomenon. I shall here deal with this point in greater detail. In Polish the development in final syllables is the same as in words in *-ija* (Old Polish *braciā*). Root-stress in Slovianian *vūolā* shows that the ictus was on the first syllable from the start. This agrees with what we find in Russian, Serbo-Croatian and Slovene. I therefore assume that this was the case in proto-Slavonic, and that the root-vowel was rising, as Slovene, Russian and Czech indicate. As proto-Slavonic ictus on the first syllable and neo-acute seem limited within the *ā*-stems to words in *-iā* (and perhaps to a few other formations which may be explained in a parallel way), I assume that there must be a connection between these two phenomena. I take it that the ictus has been retracted and that neo-acute is due to this. The type in *-ija* seems to have been preserved in proto-Slavonic (cf. Russian *семья́, семью́*, Pl. *сѣмь*). I have therefore assumed *per exclusionem* that our group goes back to forms with the sequence *-ija*, which has developed into *-jā* with a falling *ā*. This falling *ā* in a final and in a medial syllable has then transferred its ictus to the preceding syllable, which has received a neo-acute. The fact that the verbal derivatives of this type belong to verbs which have a recessive present, and where therefore the final syllable of the stem (*-i-*, *-ē-*) was originally stressed, also suggests retraction.

However, it would appear that *-ije* does not produce *-jē* in proto-Slavonic, but is retained as *-ije* with retraction of the ictus (and neo-acute),

cf. Russian *нѣпе* — Čak. *pérjī*. I am therefore disinclined to believe in a general contraction of *-ij-* + vowel, and prefer to think that in the combination *ē* + *j* + back or low vowel, by exaggeration of the contrast, *-ē-* has lost its sonority to the following vowel, which has then been lengthened.

Retraction direct from *-ē-* to the preceding syllable, i.e. *\*volija* > *\*vōl'ā*, is something I find hard to accept, because post-tonic *-ija* is preserved in Slavonic (*brat[r]ija*).

At any rate the development we find in *\*vōl'ā*, etc., seems to be one of the results of the semi-vowels in the last proto-Slavonic period losing their faculty for bearing the ictus.

Čak. (Novi) *kljēva* (Štok. *klētva*) in connection with the Russian *клѣмѣа*, Polish *klątwa*<sup>38</sup> and Old Czech *klētva*<sup>39</sup>, suggest proto-Slavonic *\*klētva*. This accentuation is difficult to explain. It might be pointed out that in Čak. (Novi) we also find *crikva* (gen. pl. *crikv* and *crikāv*), *lādva* («boat, made out of a tree»), gen. pl. *ladāv* and *lādāv*; cf. Štok. *crikva*, *crikva*; in Hvar (cf. Hraste, Južnoslov. fil. XIV p. 26) we find *crikva*, *klētva*, *mūrva*. Of these words only *klētva* has proto-Slavonic stem in *-va*, while the others are due to transformation at a later period. But I am inclined to believe that this word may have an explanation which is parallel to the one I have suggested for *\*vōl'ā*, etc., viz. that we are in fact dealing with an original *\*klētva*.

#### b. Stress on the final syllable of the stem.

In Russian and Serbo-Croatian we find *ā*-stems with constant stress on the ending, respectively — in the case of two syllables in the ending — on the first of these syllables.

In modern literary Russian there are few examples in disyllabic words. We find a greater number of examples among the polysyllabic words, but a number of these words were obviously originally mobile. In older Russian we find far more examples in disyllabic words (old disyllabic words, and such as have become disyllabic words secondarily). Thus we generally find this accentuation in the word *женá*. In Domostroj we find: nom.-acc. pl. *жены́, игры́, слугы́, дугы́, сумы́, вдовы́*, in Uloženie (1649): *жены́, сестры́, вдовы́, вины́, суды́, тюрьмы́*; in Učenie i chitrost' ratn. strojenija (1647) *война́, глава́, жена́, судья́*... belong to this type. In modern North Great Russian dialects which accentually speaking are conservative, we also find more examples than in the written language. Thus we find in the dialect of Tot'ma nom. pl. *šostrý, žoný* (Broch: *Описание одного говора*, p. 118).

In Serbo-Croatian we also find examples of this accentuation, e.g. Čak. *ženā*<sup>40</sup>:

Čak. (Novi):	Old Russian:
<i>ženā</i>	женā
<i>žené</i>	женѣ
<i>ženī</i>	женѣ
<i>ženū</i>	женѹ
<i>ženún</i>	женѹю
<i>ženī</i>	женѣ
<i>žēno</i>	женѣ
<i>ženē</i>	женѣ
<i>žen</i>	женāmь
<i>ženán</i>	женѣ
<i>ženē</i>	женāmи
<i>ženāmi</i>	женāхъ
<i>ženāh</i>	

The accentuation is columnal, i.e. in disyllabic endings the stress is on the first syllable of the ending. In a subsequent chapter I shall show that in *o*-stems we have to deal with a marginal accentuation in the mobile type, in contrast to a columnal stress in the «end-stressed» type, which corresponds to the type of *ā*-stem with which we are here dealing. There is thus no reason to assume that any change has taken place in this schema between proto-Slavonic times and Russian or Čakavian.

This type does not exist in Lithuanian. Here we only find two fundamental types, one with a fixed stress on one or other non-final vowel and one with a mobile accentuation, mainly alternating between the first and the last syllable. (With each of the types must be grouped a sub-section where de Saussure's law has operated.) It is difficult to see how the Slavonic state of things could be derived from the Lithuanian. On the other hand it is not difficult to imagine a contrary development, as the cases of end-stress which were common to the columnal and the mobile type<sup>41</sup> may have led to levelling between them. Furthermore we find the end-stressed type in pronouns: *anās*, (*anō*, *anām*, *anā*, etc., F. *anā*, *anōs*, *anaī*, *anā* . .); *kurīs*, *katrās*. It is uncertain to what extent the two types (end-stressed: mobile) also existed in Prussian. Besides the alternation: accusative singular *mērgan* : dat. pl. *mergūmans*, corresponding to Lithuanian *meṛga*: *mergoms*, we find eight times in the Enchiridion the accusative singular *deinan* as opposed to Lithuanian *diēnq*, but not a single instance of «*dēinan*». Now it is clear that we must be careful about drawing any definite conclusions on such a flimsy foundation as the accentual marks to be found in the Enchiridion. But in the *o*-stems we find similar indications, and in Lithuanian and Slavonic the *o*-stems have exactly the same accentual

types as the *ā*-stems. In the Ench. we find 30 instances of the accusative *deiwan* (never «*dēiwan*»). Fortunatov BB XXII, p. 167 f and van Wijk, Akzent-systeme, p. 46 f, assume end-stress in these forms. But I cannot agree with van Wijk when he assumes that the Prussian forms prove that all the Lithuanian mobilia were at one time end-stressed. Prussian, too, must have contained mobilia (*mērgan*: *mergūmans*). What the material seems to show is that Prussian, like Slavonic, had three groups.

### c. Mobile stress.

Slavonic languages show one type of mobile *ā*-stem which can definitely be shown to derive from proto-Slavonic. The other types which exist in the separate languages should probably be regarded as secondary.

This type of accent in proto-Slavonic becomes clear if we compare the Russian, Serbo-Croatian, and Slovene paradigms:

S.-Cr.: Štok.	Čak. (Novi)	Slov.	Russ.
<i>gláva</i>	<i>gorā</i>	<i>góra</i>	<i>горá</i>
<i>glávē</i>	<i>goré</i>	<i>gorē</i>	<i>горѣ</i>
<i>glāvi</i>	<i>gorī</i>	<i>góri</i>	<i>горѣ</i> (Dial. and Old. R.
<i>glāvu</i>	<i>gōru</i>	<i>gorō</i>	<i>гору</i> к стóронѣ, etc.)
<i>glāvōm</i>	<i>gorún</i>	<i>gorō</i>	<i>горóю</i>
<i>glāvi</i>	<i>gorī</i>	<i>góri</i>	<i>горѣ</i>
<i>glāve</i>	<i>gōre</i>	<i>gorē</i>	<i>горѣ</i>
<i>glāvā</i>	<i>gór</i>	<i>gór</i>	<i>гор</i>
<i>glávama</i>	<i>gorán</i>	<i>gorām</i>	<i>горám</i>
<i>glāve</i>	<i>gōre</i>	<i>gorē</i>	<i>горѣ</i>
<i>glávama</i>	<i>gorāmi</i>	<i>gorāmi</i>	<i>горáми</i>
<i>glávama</i>	<i>gorāh</i>	<i>gorāh</i>	<i>горáх</i>
		<i>góri</i>	
		<i>gorāma</i>	

In the dative singular root-stress was clearly the original. It still survives in some words in Serbo-Croatian. In connection with *κ* it is to be found in Old Russian, and to a certain extent still survives in Russian dialects. Thus we have *g-žime*, *k-storohe* as opposed to locative *o žime*, *na storonē* in Tot'ma (Broch, op. cit. p. 118). Cf. the Čudov NT: *стрāнѣ* 68a, *зѣмлю* 68a, *водѣ* 64a. *Usakov. 9.8*

In Slovene we find examples of old root-stress in nom.-acc. dual. (*gubē*, adj. *mladē*). We also find traces of it in Bulgarian, e.g. *рāцѣ*, *нōзѣ* (Ljubl. Damaskine), etc., Kodov, op. cit. p. 37.

The alternation we here find with regard to ictus is marginal, i.e.

the alternation does not take place between penultimate and last syllable, but between first and last. Intermediate syllables are «skipped». Thus in Russian we find: *сковорода́*, (dial.) *сковоро́ды*<sup>42</sup>, *сковоро́д*, *сковорода́м*, *хлопо́ты* : *хлопо́т*, *хлопо́там*. In Serbo-Croatian *veličina*, *veličinu*, *veličine*, etc. We find the same accentual paradigm in Kashubo-Slovincian, and here polysyllabic words give a very clear idea of the alternation of stress in this paradigm.

<i>rob<sup>u</sup>òta</i>	<i>ròb<sup>u</sup>otě</i>	<i>ròb<sup>u</sup>oce</i>
<i>rob<sup>u</sup>otě</i>	<i>rob<sup>u</sup>òt</i>	<i>rob<sup>u</sup>òtū</i>
<i>rob<sup>u</sup>òce</i>	<i>rob<sup>u</sup>òtām</i>	<i>rob<sup>u</sup>òtāma</i> <sup>43</sup>
<i>ròb<sup>u</sup>otq</i>	<i>ròb<sup>u</sup>otě</i>	
<i>rob<sup>u</sup>òtq̄</i>	<i>rob<sup>u</sup>òtamī</i>	
<i>rob<sup>u</sup>òce</i>	<i>rob<sup>u</sup>òtaχ</i>	

If we take into account that ictus is everywhere retracted one step (in polysyllabic words even from a long stressed end syllable), we shall find exactly the same alternation as in Russian *голо́ва*. End-stress has been introduced in the dative singular, as in modern Russian. The dual shows ictus on the first syllable in the nominative and accusative.

We can thus with a great degree of certainty construct a proto-Slavonic paradigm for the mobile *ā*-declension:

<i>*golvā</i>	<i>*golvy</i>	<i>*golvě</i>
<i>*golvȳ</i>	<i>gólva</i>	<i>*golvū</i>
<i>*golvē</i>	<i>*golvām̃</i>	<i>*golvāma</i>
<i>*golvo</i>	<i>*golvy</i>	
<i>*golvojð</i>	<i>*golvāmi</i>	
<i>*golvē</i>	<i>*golvāχ̃</i>	

The following observations should be made:

1. Instr. sing. *\*golvojð* — as opposed to Russian *голово́ю* — is indicated by the rising intonation in Čak. *gorún*, Slov. *goró*. In the columnal type b (*ženā*) one might on the other hand expect the accentuation *-ðjð*, which would probably have resulted, in some of the separate languages, in a circumflex contracted vowel and in retraction. However, here, too, we find Čak. *-ún*, etc., Slov. *-ó*<sup>44</sup>. On the other hand Russian *женё́ю* agrees with what one would expect in this type. I therefore assume that Russian has generalised *\*-ðjð* from type b, Serbo-Croatian and Slovene *\*-ojð* from type c.

2. Locative plural *\*golvāχ̃* derives, I assume, from type b. In the marginal type we expect end-stress as in Lithuanian (Tverečius *mergāsū*). In *\*golvaχ̃* ictus would naturally have to be retracted from *-ā*. With retraction, however, we regularly find neo-acute, and I can find no evidence that any difference existed between acute and circumflex in unstressed syllables

at the time when this retraction took place, and that therefore an originally acute vowel should have behaved differently from an originally circumflex vowel in this respect. But in the event of type b in the locative plural in Slavonic regularly having *-āχ̃*, and type c *-āχ̃̃*, it is highly probable that levelling took place. We have already observed a similar development in word formation in the separate languages: a suffix which phonetically ought to be sometimes long, sometimes short, frequently generalises one of these quantities, preferably the one which existed where the suffix was stressed. I assume that *-āmi*, *-āma* are also due to the generalisation of type (b), possibly on the basis of the generalised form *-āχ̃* in the locative plural. The Kash.-Slov. instr. pl. in *-amī* in disyllabic *ā*-stems is probably secondary, as ictus should be retracted even from long stressed final syllables in polysyllabic words<sup>45</sup>. Dative plurals in *-ām̃* may have the same explanation as *-āχ̃*, although in Old Lithuanian we find *-ómus* with the stress on the *o* (see below).

3. Genitive-locative dual *\*golvū* is uncertain, as Slovincian *-ū* may go back to *-oju*. But cf. Čud. N.T. *нозо́у* (153b).

If we consider the Lithuanian paradigm we shall find that it agrees very closely with the proto-Slavonic:

Lith. <i>galvā</i>	=	proto-Slav. <i>*golvā</i>	Lith. <i>galvos</i>	=	proto-Slav. <i>*golvy</i>
» <i>galvōs</i>	=	» <i>*golvȳ</i>	» <i>galvū</i>	=	» <i>*gólva</i>
» <i>galvai</i>	=	» <i>*golvē</i>	» <i>galvoms</i>	≠	» <i>*golvām̃</i>
» <i>galva</i>	=	» <i>*golvo</i>	» <i>galvas</i>	=	» <i>*golvy</i>
» <i>galva</i>	but	» <i>*golvojð</i>	» <i>galvom̃s</i>	but	» <i>*golvāmi</i>
» <i>galvojė</i>		» <i>*golvē</i>	» <i>galvosė</i>	but	» <i>*golvāχ̃</i>
			» <i>galvi</i>	=	» <i>*golvē</i>
			» <i>galvóm</i>	≠	» <i>*golvāma</i>
			» <i>galvōm</i>		

We find full agreement in the nom., gen., dat., acc. sing., nom. - acc., gen. pl., nom. - acc. dual. There is also complete agreement in the dat. pl., dual, but the stress on *\*-ā-* differs from the marginal type, and may in Baltic as in Slavonic possibly have been introduced from type (b).

Differences between the two paradigms are as follows:

1. Instr. sing. belongs in Lithuanian to the cases which stress the first syllable. (This rule applies to forms of the *o*- and *ā*-declension, as opposed to the instrumentals ending in *-mi*). It should, however, be observed that the Baltic and Slavonic forms do not cover one another.

2. In the instr. pl., Slavonic has taken over the stress from type (b), while Lithuanian has preserved the marginal stress. The same applies to the locative plural. Admittedly the forms of the locative do not cover one another

exactly, as Lithuanian has *-ose*, a modification of an older *-osu*. But this form almost certainly had end-stress, cf. Tverečius *žarnāsù, šakāsù* (Otrębski, Wschodniolitewskie narzecze Twereckie p. 228 f.). Cf. also the adverbial form *akisù* belonging to the *i*-declension (Būga, Žod. 37).

3. The Lithuanian loc. sing. *galvojė* does not, of course, cover Slavonic \**golvē*, as the Lithuanian form shows an extension *-e* (< \*-ē) of the old locative in \*-āi (cf. adessive *mergaip*). In the type *galvojė* the element *-e* (< \*-ē) seems to have been added to an end-stressed form in \*-āi, as the addition of the same element *-e* to forms which undoubtedly had root-stress gives us a root-stressed locative (*stirna: stirnoje*).

There are so many characteristic agreements between the Baltic and the Slavonic accentual paradigm that there can be no doubt about their historical identity. In my opinion a Balto-Slavonic prototype may be constructed with a very great degree of certainty. (As an example I shall take a disyllabic substantive, giving only the ictus [designated I], and not the intonation).

	Sing.	Pl.	Dual.
Nom.	x I	I X	I X
Gen.	x I	x I	
Dat.	I X	x x I (?)	x x I (?)
Acc.	I X	I X	I X
Instr.	?	x x I	x x I
Loc.	x I	x x I	

However, Baltists have adduced weighty arguments to shew that the Lithuanian mobile paradigm goes back to a paradigm with constant end-stress. In this case the agreement with Slavonic, which is so striking, would be due to a later parallel development.

The fact which is regarded by so many as proof of the original final stress in these words is the accentuation of the secondary cases: illative and allative. In the Lithuanian paradigm the principle is that only words with an old fixed root-stress retain this in the cases mentioned: *liepon, lieposp, lieposna, liepump, rañkon, rañkosna* but *trobōn, trobōsna; dienōn, dienōsna*, etc. The same is true of the other stems, e.g. *výrop, būdop* as opposed to *darbóp*, etc. This accentuation has mainly been explained in two ways:

Specht (Lit. Mundarten II, p. 41, KZ LIII, p. 90 ff) explains the stress of the illative as an adaptation to the other cases: «Genau wie man *waikaĩ, kelmaĩ, pōnai, tiltai* betont, so betont man auch *waikañ, kelmañ, aber pōnan, tiltan*» (L. M.). The basis for end-stress is in his opinion (KZ LIII) to be seen in the advancing of ictus to the particles *-na, -pi*.

Subsequently a regrouping took place according to the locative and other cases stressed like the locative.

Other scholars regard these forms as proof that the present mobile paradigms, at the time when the illative was formed, were still constantly end-stressed, i.e. that the accusative singular and plural had the forms \**galvāñ, \*galvās*. This is maintained by Būga, Žodynas XXXI f; van Wijk, Akzentsysteme, p. 46 f; Nieminen, Ausgang *-ai*, p. 161 ff; Skardžius, Daukšos akcentologija, p. 131 ff.

At this juncture a few words should be said about the earlier stress of these forms in Lithuanian. In the illative singular the oxytone forms probably originally accented the final *-a*. Cf. Dusetos *tan'* as opposed to *tām* < *tāmui* (Būga in Wolters Chrestomaty, p. 359), cf. also Tverečius *lungaĩ* as opposed to *gerām* (< *gerāmui*), etc. (Otrębski, Narzecze Twereckie), Lazūnai *galvo'n* (i.e. *galvōn*), Arumaa, p. 3246; but if *dienōn*, etc., is derived from \**dienonā*, then we still do not know whether the original stress was on the *-o* < \*-ā- or on \*-na, as *-ona* must go back to *-ān* + a particle *-na*, the *-a* of which may be a shortened acute vowel. In that case *-ānā* (stress on *ā*) would give *-onā* in the same way as end-stressed \*-ānā.

As far as the plural of the illative is concerned, this does not agree accentually with the locative plural. The locative plural accented the last syllable, and the illative the penultimate.●

cf. Tverečius: ill. pl. *trābāsun, mergāsun; mindrēsun; plāukuosun, daržuosun*.

Loc. pl. *žarnāsù, mergāsù; mindrēsù; plāukuōs, daržuōs* (Otrębski p. 214 ff).

Dieveniškis: ill. *lubōsnan, šaudūosnan, šalýsna* [Arumaa p. 19 ff],

Catechism 1605: ill. *dungūosnu*, loc. *dunguōsù*.

Finally, I refer to Būga, K. Sn., p. 160: «Einamojo vidaus vietininko (illativus plur.) galūnė yra *-ūosna*, o ne \*-uosnā... kaip kad rašo Leskynas. *Namuosnā... rankosnā... yra ne kalbos faktas, bet Kursaičio... padaras. Gyvoje kalboje sakoma: namūosna, rañkosna, dantýsna, ėglėsna* (Salakas, Linkmenes).» [The ending of the illative plur. is *-ūosna*, and not \*-uosnā... as Leskien writes. *Namuosnā... rankosnā...* are not linguistic facts, but Kurschat's inventions. In the living language we find *namūosna...*] In the same way the adessives and allatives in *-pi* are accented in the mobile substantives: *Dievópi, Dievlepi, namópi, namlepi*, (Būga, op. cit. p. 82, 275); cf. Dieveniškis: *džievóp* (Arumaa). Thus a secondary adaptation of these cases to the accentuation of the locative plural cannot have taken place. The instrumental plural, too, was marginally accented in the mobile declension (*dienomis*). It is only the dative plural which is accented like the secondary cases.

As regards the type *rañkosna*, it is hardly probable that this is original. The accusative plural had an acute final vowel, and according to de Saussure's

law we should have expected *rankósna*. This is moreover what we find in Tverečius, where we have ill. pl. *ruñkásun* as opposed to loc. pl. *ruñkásui*. In the same way: *vartúosun* as opposed to loc. *vařtuos*, *durísun* as opposed to *dūřisu*. I consider it probable that the dialect of Tverečius has here preserved the older accentuation, and that *rañkosna* is due to adaptation to *rañku*, *rañkoms*, *rañkomis*, *rañkose* (cf. Skardžius, *Daukšos akcentologija*, p. 135).

One might wonder whether *trobósna*, etc., too, might not have been formed by analogy with *trobũ*, *trobóm(u)s*. But this is hardly likely, first of all because the basis for an analogy of this kind is less clear here than in the type *rankà*, where all plural forms, apart from the acc. pl., have root stress, while *trobà* has ictus in three different places. It would furthermore be difficult under these circumstances to explain how *trobósna* could be an older form than *rañkosna*, which must be the case, as the latter is not to be found in all dialects. Besides, the phenomenon is far more widespread: we also have the illative sing. *trobõn* and furthermore the allative of *o*-stems of the type *dievõpi*, which present the same problem: end-stress versus root-stress in the accusative (*tróbq*), and genitive (*diěvo*). The type *trobõn* < *\*trobónà* might have been influenced by the locative *trobøjè*, but how can we explain *\*dievõpi*? As analogous with *\*dievtepi*? We are in fact compelled to provide individual explanations in every single case. Thus the doctrine of adaptation to the other cases presents considerable difficulties.

On the other hand the doctrine that the mobile types were originally end-stressed in all cases, is also fraught with very great difficulties. The agreement between Baltic and Slavonic is so great that it is very difficult not to accept the idea of original unity.

I am inclined to look for the explanation of Lithuanian *trobõn*, *trobósna*, *dievõpi* in the fact that the Lithuanian mobile group includes both old mobilia and old columnally-stressed words.<sup>47</sup> In the last group *-õn*, *-ósna*, *-añ*, *-úosna*, *-õpi* are entirely regular. The Lithuanian mobile paradigm has in the main taken over the accentuation of the old mobile paradigm. And yet the result is nevertheless a mixture. In the dative plural and dual the columnal paradigm seems, for reasons which are unknown to us, to have triumphed. The same is true of the secondary cases. It may be possible that in forms with disyllabic endings a levelling of the columnal and the marginal paradigm took place at a very early date, so that both types got the same stress in these cases, before the mobile accent type was carried out in forms with a monosyllabic ending.

Thus my explanation does not essentially differ from the one given by Būga, van Wijk, Nieminen, and others, who, like myself derive *-õn*, *-añ*, *-ósna*, *-úosna*, *-õpi* .. from end-stressed substantives. But I am of the

opinion that not all substantives which subsequently got this stress in the secondary cases were originally end-stressed.

I assume therefore that a Balto-Slavonic mobile type existed with the accentuation illustrated on page 68.

But in the separate languages, one also finds other types of mobilia. Thus in Russian we find a type with the stress on the first syllable only in the nominative and accusative plural, not in the accusative singular (*волна́, волну́, волны́, волна́м*). This type is quite common in Russian in nouns which have a stressed *-á* in the nominative singular. Probably it is merely a simplification of the mobile paradigm (*гора́*) dealt with above. In historic times we see how the type *волна́* gains ground at the expense of the other. Cf. *слобода́*, acc. *слободу́* and *слободу́*, pl. *слободы́, слобба́, слобода́м*.

This type is also encountered in Serbo-Croatian. Daničić (*Српске акценти* pp. 5, 7) gives as examples *ви́ла, гу́ја, је́ла, ку́ла, му́ња, о́вца, сви́ња, сла́на, слуга́, срна́, стрéла, то́рба, тра́ва, бу́ха, зми́ја, му́ха, па́вта, сна́ха, су́за, те́ла*.

I believe that this S.-Cr. type must be explained in the same way as the Russian.

In Mod. Russ. this type in disyllabic words merges with another, in which stress on the first syllable has been carried through in the whole plural. As far as I know, this second type occurs only in Russian, and even here indisputable examples of it are not found in older accented texts. For this reason I consider it to be secondary. It is very much alive in Modern Russian, where *inter alia* it is spreading at the expense of the above-mentioned (*волна́*); in fact, constant root-stressed plurals are also to a certain extent introduced in mobile words which have preserved root stress in the accusative sing. Thus according to Ušakov we find from *верста́*, acc. sing. *ве́рсту* and *версту́*, nom.-acc. pl. *ве́рсты*, dative pl. *ве́рстам*, beside *верста́м*.

This type has to a large extent displaced constant end-stress (type b), cf. *жена́, жену́* : *жéны, жéн, жéнам, жéнами, жéнах*; *сестра́, сестру́* . . : *сёстры, сёстрам* . . (gen. pl. *сестёр* is a relic of a former end-stress).

The last-mentioned case, where there were no forms with root-stress capable of causing levelling, suggests that this type is not a direct continuation of the former (*волна́*). This is also apparent in the polysyllabic words. While *слобода́* has as its plural *слободы́*, the word *сирота́* has a nom. pl. *сиро́ты*, etc. In other words, while in the first type (*волна́, волны́, волна́м*) we find an alternation between the first and the last syllable, the second type (*жена́* : *жéны, жéнам*) has an alternation between the last and the penultimate. That is to say, while the type *волна́* is a continuation of the type *гора́*, the type *жена́* : *жéны* seems to be of the same kind as *окно́*:

о́кна, веретено́ : веретёна. It must, however, be due to analogy, as it is fairly recent. It is not my task at this juncture to explain exactly how this type has arisen, as I am concerned here with the proto-Slavonic types; but I might mention in passing that this type is a stage in a movement in the direction of polarity between the singular and the plural which is characteristic of Russian. The fact that the barytonised nom.-acc. pl. N. has in many Russian dialects assumed the ending -ы instead of -а, and that this — besides the endingless genitive plural — made it possible for the neuters to influence the *ā*-stems in the plural by analogy, should perhaps also be taken into account. In the singular there was agreement of form in the locative. On the pattern of the type *решетё*: (*решёты*), *решёт*, *решётам*, a dat. pl. *сиротам* (and a nom. pl. *сироты*) may have been formed besides *сиротё*, *сирот*. Though originating in a different group of words from the type *волна́*, *во́лны*, *волна́м*, the type *женá*, *жéны*, *жéнам* has subsequently invaded the sphere of the former, so that in words of the type *волна́* (in fact even of the type *душа́*), we get plural forms on the pattern of *женá*, *жéны*, *жéнам*. If this theory is correct, one might have expected disyllabic forms of the type *жéны*, with *o* in the root syllable, to have *ω* in those dialects where this sound has been preserved. To what extent this is actually the case, I cannot say; but it should be borne in mind that in the nom.-acc. pl. N. *o* has, to a certain extent, been generalised in the dialects, cf. *oknô*: *ókna* (gen. *ókon*) in Tot'ma (Broch, op. cit. 122).

### O- and *jo*-stems.

#### 1. Masculine.

In considering the material which is available in the various Slavonic languages, it seems natural to apply the same sub-divisions as in the case of the *ā*-stems.

##### a. Constant root-stress

This stress occurs in *o*-stems with acute vowel in the stressed syllables. In the gen. pl. secondary circumflex arose. Examples:

Čak. (Novi)	Slov.	Russ.
<i>čās</i>	<i>rāk</i>	<i>рак</i>
<i>čāsa</i>	<i>rāka</i>	<i>рака</i>
<i>čāsu</i>	<i>rāku</i>	<i>раку</i>
<i>čās</i>	<i>rāka</i>	<i>рака</i>
<i>čāsōm</i>	<i>rākom</i>	<i>раком</i>
<i>čāsi</i>	<i>rāku</i>	<i>раке</i>

Čak. (Novi)	Slov.	Russ.
<i>čāsi</i>	<i>rāki</i>	<i>раки</i>
<i>čās</i>	<i>rākov</i> <sup>48</sup>	<i>раков</i>
<i>čāsōm</i>	<i>rākom</i>	<i>раком</i>
<i>čāsi</i>	<i>rāke</i>	<i>раки</i>
<i>čāsi</i>	<i>rāki</i> <sup>48</sup>	<i>раками</i>
<i>čāsīh</i>	<i>rākih</i> <sup>48</sup>	<i>раках</i> .

The question might arise as to whether this type also included words with circumflex or short falling root-vowel (the Lithuanian type *pōnas*). In Russian we find a great many words with constant root-stress which cannot have had acute long vowel. These include *inter alia* words with a short stressed vowel outside the first syllable. This was rising. This type is also to be found in the other Slavonic languages where proto-Slavonic ictus has in principle been preserved. Examples:

*завод, при́бор, навóz* . . , dial. (Grjazov) *прибо́р, заводы, навоз* . . .<sup>49</sup>; Čak. *zākón*, gen. *zākōna*. This group naturally includes words which are now monosyllabic in the nom. sing., but which were previously polysyllabic, such as *взор, вздох*, etc.

But we also find a number of immobile words with a short falling or — it must be assumed — originally circumflex first syllable: *клик* (cf. Serbo-Croatian *klik*), *крик* (Serbo-Croatian *krik*), *брод, стон, вóрон, вонль, мо́лку*, etc. In Čak. (Novi), in monosyllabic words with a circumflex vowel in the nom. sing. (originally short falling and long circumflex vowel), we find an optional genitive-locative plural with end-stress: *brodīh, vlasīh*. I assume that these forms are old end-stressed locative forms and that they are survivals of old mobility. Thus I consider it probable that in the case of the *o*-stems, as with the *ā*-stems, the old pre-Slavonic immobile words with a short or circumflex root vowel have passed over into the mobile declension.

##### b. Stress on the final syllable of the stem

In Russian we find a great many words with end-stress in all forms: *царь*, gen. *царя́* . . , *двор, нож, рубль*, etc. Words with end-stressed genitive singular, etc., are also found in Serbo-Croatian and Slovene, but the accentuation of these words shows some differences from that of Modern Russian. In older Russian, too, we find deviations.

The following declension is to be found in Čakavian and Slovene:

	Čak. (Novi)		Slov.
sg N	<i>krōv</i>	— <i>brést</i>	— <i>kònj</i>
g	<i>krovā</i>	— <i>brēstā</i>	— <i>kónja</i>



Čak. (Novi)		Slov.
Ž. <i>krovŭ</i>	— <i>brěstŭ</i>	— <i>kónju</i>
A. <i>kròv</i>	— <i>brést</i>	— <i>kónja</i>
Ž. <i>krovón</i>	— <i>brěstón</i>	— <i>kónjem</i>
Ž. <i>krovŭ</i>	— <i>brěstŭ</i>	— <i>kónju</i>
Ž. <i>krovŭ</i>	— <i>brěstŭ</i>	— <i>kónji</i>
g. <i>kròvih (krovih)</i>	— <i>brěstih (brěstih)</i>	— <i>kónj</i>
Ž. <i>krovón</i>	— <i>brěstón</i>	— <i>kónjem</i>
A. <i>krovŭ</i>	— <i>brěstŭ</i>	— <i>kónje</i>
Ž. <i>krovŭ (kròvi)</i>	— <i>brěstŭ (brěstŭ)</i>	— <i>kónji kónji</i> <sup>50</sup>
Ž. <i>kròvih (krovih)</i>	— <i>brěstih (brěstih)</i>	— <i>kónjih kónjih</i>
		— <i>kónja</i>
		— <i>kónjema</i>

Nom. (acc.) sing. has neo-acute in the root syllable owing to retraction of the ictus from final -a, -b. Retraction is also to be found in the loc. and instr. pl., both in Slovene and Čak. (The end-stressed lateral forms in Čak. may be assumed to be analogical, as it is the forms with retraction that are supported by Slovene. The Slovene circumflex in *kónji*, -ih may be secondary, and may have arisen instead of a neo-acute under the influence of the type *brátih*<sup>51</sup>). As far as the origin of this retraction is concerned, I am of the opinion that in the loc. pl. we have a probable explanation in the following:

The type of words with which we are here dealing was originally not end-stressed, but had a columnal stress on the last syllable of the stem (the thematic vowel). In the loc. pl. we therefore expect originally the ending -ězŭ (with circumflex ě, because the vowel arose from the diphthong *oi*, Indo-European \*-oisu). The ictus then moved from this inner circumflex over to the preceding syllable, which became neo-acute.

As we saw on page 42, the ending -i < -y in the instr. pl. was long in Slovene, Slovincian, and to a certain extent in Czecho-Slovak. It is, however, not likely that retraction is due to this, as the lengthened *i* < *y* had a rising stress, cf. Slov. *stəbrŭ*, Posavina *s konŭ*, etc. I am inclined to believe that retraction in the instrumental may be due to the influence of the locative.

Slov. loc. sing. *kónju* has a circumflex root vowel, which must be considered as secondary in the end-stressed paradigm (see above). There is nothing in Čakavian corresponding to this.

According to Ramovš, Južnosl. fil. II p. 229 ff, the Slovene loc. pl. *kónjih* has acquired its *o* from the gen. pl., instead of the expected *o*, which occurs dialectically in *kónjih* («analogičnim»). Ramovš is also of the opinion that the intonation in *kónjih* is borrowed from the genitive; I do not consider that this is necessarily so. If loc. and gen. pl. already had

the same intonation, a levelling of the vowel would have occurred all the easier, and, as we have seen, Ramovš regards the circumflex in *kónjih* (Borovnica *kuŭinax*) as analogical.

We also find traces of retraction in the loc. pl. in Old Russian. In Russian the nom. sing. shows old neo-acute in the dialects which have the contrast *o* : *o*; cf. Lěka: *стол, пол, сноп, конь, двор, тѡй* besides *гот* (year), *бог, дом, зрон* (gen. *зрѡба*), cf. Šachmatov, Sborn. otd. r. jaz. i slov. 95. A great many examples of retraction (with neo-acute) in the locative plural are to be found in older Russian in the word *дворъ*: (*во*) *дворѣхъ*, Uloženiye (cf. Kiparsky p. 29), Ups. Slav. 22 [1667], Ups. Ksl. Fol. 3, [1630] 104b, Kormčaja 1650, 84a, Triod' 1621, 21a, Smotrickij 313. (Cf. also Vasiljev, Kamora 114). The accentuation *во, на дворѣхъ* clearly shows that *o* had rising intonation. If not, the stress would have been retracted to the preposition. I assume therefore that this form must be grouped together with Čak. *kròvih, brěstih*, Kajk. *kōni(h), vōli(h), lōnci(h)* [Ivšič, Ljetop. 48, p. 72], Slov. *kónjih*.

In the word *конь* we find root stress in some instances in the plural in Russian. With regard to the extent of this phenomenon, there is a great difference between the various Great Russian and Russian Church-Slavonic texts, and between the various modern dialects: *на кони* 13b, *на конехъ* 22b (Učeniye i chitrost'), dat. *конемъ* (Azbukovn. 1654, cf. Buslajev 1113, Novg. lětop.<sup>52</sup>), gen. *коней* (Novg. lětop.), *наконехъ* (Sborn. Sof. Bibl.<sup>53</sup>, Triod' 1621, 137b.)

Other instances of root stress in the loc. pl. are sporadic. In Uloženiye we find *рублехъ* 122b besides *рублѣ*, in Korm. 1650 loc. pl. *жидѣхъ*, instr. pl. *жиды*, beside gen. *жидѡвъ*, dat. *жидѡмъ* (cf. Kiparsky, s. 22 ff.)

Sometimes root stress spreads to the other plural cases. We have seen examples of this in the word *конь*. I have furthermore noted nom. pl. *плѡди* 24, instr. *плѡды* 25 besides dat. sing. *плѡдѹ* 44, gen. pl. *плѡдѡвъ* 42 from Domostroj (Čtenije imp. obšč. ist. 1908); cf. furthermore *скѡти* (Novg. lětop.), *скѡтомъ* (Pal. 16th. century), *скѡты* (Torž. 16th century), instr. *скѡты* (Pal. 16th century)<sup>53</sup>, *дрѡзды* (Alf.)<sup>53</sup>, nom.-acc. pl. *кѡнцы* 5, 6, loc. *кѡнцахъ* 13 besides nom. sing. *кѡнѣцъ* 7, nom.-acc. pl. *кѡнѣцы* 12, gen. *кѡнѣвъ* 5, dat. *кѡнѣмъ, кѡнѣмъ* 9, loc. *кѡнѣхъ* 8 (Knižn. perepl. 16–18th century).

I take it that analogical retraction has taken place, in varying degrees in the various words, on the basis of the loc. pl., which in Russian provides the strongest evidence of retraction.

Thus in Old Russian this type shows a certain tendency to stabilisation of the ictus on the root vowel in the plural, while it is on the ending in the singular. It is the principle of polarity that is here in evidence, a principle which in the corresponding neuter words seems to have been

carried out already in proto-Slavonic. However, this principle has not penetrated in the masculine, apart from the word *конь* in certain dialects; cf. the declension *коѡ, коѡа, каѡѡ, каѡѡм, каѡѡи (каѡѡ) — коѡѡи, коѡѡѡ, коѡѡѡм, коѡѡѡѡи, коѡѡѡѡ(-ѡѡѡ)* in Spas-Deminskoje (Broch, *Говоры к западу отъ Мосальска* p. 111). As a rule end-stress has been carried through in the whole plural, just as in the singular. The reason why *дворѡѡѡ* and *конѡѡѡ* have been especially well preserved, may be that in these words the locative was particularly widely used (*во дворѡѡѡ, на конѡѡѡ*), and for that reason impressed itself with more than usual clarity on the consciousness.

Similar tendencies towards a generalisation of root stress in the plural can also be found elsewhere. In the Quarnero Islands (Milčetić, Rad 121, p. 92 ff) the following declension exists: *stô, stolâ, stolŭ, pl. nom. stolŭ, gen. stôli, dat. stolŭm, instr. stôli, loc. stôlih*, while in Dubašnica we find: *stôl, gen. stolâ . . , pl. nom. stôli, gen. stôli, dat. stolôn, acc. stôli . .*

In Serbo-Croatian *skôt* (<\*skotâ; cf. Russ. *скот, -а*) has acquired the stress *skôta*, etc., with root-stress in all forms like *râk, râka*, etc., as opposed to the retained end-stress we find in *pôp, pôpa; bôb, bôba; snôp, snôpa; kônj, kônja*, etc. Slov. *skôt, skôta* corresponds to Serbo-Croatian *skôt, skôta*.

In Slovincian a number of the words which are usually end-stressed in the Slavonic languages have fixed root-stress. This suggests old retraction, at any rate in the genitive, dative, instrumental, locative plural. Here, from *kôun* (horse) we find in the plural

<i>kùëni, -nâ</i>	as against <i>gùëscâ</i>
<i>kùëni, -nou</i>	<i>gesci, -côu</i>
<i>kùënim, -noum</i>	<i>gescôm</i>
<i>kùëni</i>	<i>gescôu</i>
<i>kùënamî, kôunmî, -nîmî</i>	<i>gescmî, -camî</i>
<i>kùëniç, -nâç</i>	<i>gescâç</i>

We find the same stress as in *kôun* in e.g. *bîk, gřêç', çlêv, klûč, krôul, sôud, ščit, vjêřç, vóusâ, bjîč, kuçt, mjêč*. But we find end-stress in the above-mentioned cases in *bôub, drôuzd, dvôr, snôep, vóul, žîd*.

Apart from the gen. pl., where the accent is always retracted from -ô, -â, I can only find one case where proto-Slavonic retraction must definitely be assumed, viz. the locative plural.

### c. Mobile stress.

In Russian we find several types of mobile stress in the *o*- and *jo*-stems. In the first place we find a type with the ictus on the last (respectively penultimate) syllable from and including the gen. pl.: *зуб, зѡба . . зѡбы, зѡбѡв, зѡбâм, зѡбâми, зѡбâх*.

This is an old-established type in Russian, older than the introduction of modern endings into the plural. The old nom. pl. in -*u* was root-stressed, cf. *терту* (gen. *тертѡѡ, dat. тертâм*, etc. have acquired «soft» endings under the influence of the nom. pl.). Gen. pl. *волѡс* besides nom. sing. *волѡс* has arisen from \**vôlsâ* < \**volsâ* with retraction of the ictus from -â, accompanied by neo-acute. (cf. Čak. [Hvar] *zûb*, gen. pl. *zûb*, Hraste, Južnosl. fil. XIV, p. 18; or *vlâs*, gen. pl. *vlâs*, Rešetar, Rad 136, p. 136). In the dative and locative plural we find end-stress, e.g. in Učenije i chitrost' (1647) *вѡры, вѡрѡвѡ, вѡрѡмѡ* besides *вѡрâмѡ; зѡроды, зѡродѡѡѡ*<sup>54</sup>. Cf. furthermore *вѡкѡмѡ* Korm. 1650, 292a, *мѡжѡмѡ* ibid. 270 b; *родѡмѡ* Smotr. 184, *градѡмѡ* Stogl., etc., see Buslajev 803; *домѡѡ* Korm. 1650, 263b; *зѡбѡѡ* Čud. NT 31a. The Čudov NT, however, has root stress in the dat. pl. in most cases. — In the instr. pl. we usually find root stress: Uč. i chitr.: *мâстеры* (besides gen. *мâстерѡѡѡ*)<sup>54</sup>, Uloženiye (1649): *зѡроды* 222b, 229b, *прѡмыслы* 43b, etc., *сыски* 69b, etc. (besides *лѡсâми* 223b, *пѡзѡбâми* 256a with the new endings), Domostroj: *ѡбразы* 8 (besides gen. *ѡбразѡѡ* 21), Kormčaja 1650: *дâры* 108b (and the acc. *дâры*), *ѡбразы* 291b (besides gen. *ѡбразѡѡ* 14b), *мѡжи* 32b, 46a, 217b, etc.; Podlinnik o knižn. pereplete (16–18th century): *мâстеры* 3 (besides *мâстерѡѡѡ* 3). On the other hand we find in Triod' (1621): *зѡбы своѡми* 135a, *ѡбразы* 53b, 81a, *дâры* (acc. *дâры*, 105a); Ustav Nîla Sorskago (17th century, Buslajev 1335): *пѡмыслы*; the Bible 1663: *зѡбы* (Acta 7); Čud. N.T. *зѡбы* (21a, 63a) *власы* (47a, 48) [nom. *власы* 112b], *роды* (125b) [acc. *роды* 126a], *пѡслѡухы* (139a). The most probable explanation seems to be that the end-stress is the oldest, and that the instr. pl. to some extent had the ictus withdrawn under the influence of the acc. pl.

In Slovene we find in the written language (Breznik, Slovica p. 78) the declension:

<i>dûh</i>	<i>duhŏvi, možjê</i>	<i>duhŏva, možâ</i>
<i>duhâ (dûha)</i>	<i>duhŏv, mŏž</i>	<i>duhŏvoma, možêma</i>
<i>dûhu, možû</i>	<i>duhŏvom, možêm</i>	
<i>dûh (duhâ)</i>	<i>duhŏve, možê</i>	
<i>dûhom</i>	<i>duhŏvi, možmî</i>	
<i>dûhu, na brêgu,</i>	<i>duhŏvih možêh</i>	

The singular forms show old root-stress, except for the locative, where *na brêgu*, as the acute shows us, must have retracted the ictus. This form agrees with the Russian *на берегу*. Most monosyllabic words have been extended with the addition of an -*ov*- in the plural, and the original accentuation can therefore not be clearly ascertained. The acc. pl. *možê* shows old root stress, as in Old Russian *зѡроды*. Loc. pl. *možêh* (with the *ê*-vowel transferred from the «hard» declension) has end-stress like Old Russian *зѡродѡѡѡ*. Dat. pl. *možêm*, on the other hand, shows old root

stress as opposed to Old Russian *зородома*. The form *\*môžem* must be assumed to be due to analogical retraction under the influence of the nom. and acc. pl. In the instr. pl., in the older language, we find *bogí* with end-stress as in Russian Church Slavonic *зѡбі* (see above). The nom. acc. dual has old root stress: *možā* < *\*môžā*. This agrees with Russian Church Slavonic *дѣа мѡжа* Čud. NT 32a, etc. Thus, as we can see, there is a considerable measure of agreement between the Slovene paradigm and the Russian, (V. Ušakov) The Kajkavian paradigm also agrees with this (Prigorje): *drôb, drêba* ... pl. *drêbi, drebôv, drêbom, drêbe, drebmî, drebi* (Rožić, Rad 115, p. 101).

In Čakavian the accent is to a greater extent fixed on the root syllable. Cf. Novi: *vlâs, -a, -u, -ôn, -i*, pl. *vlâsi, vlâsih (vlâsih), vlâson, vlâsi, vlâsi, vlâsih (vlâsih)*. Loc. (secondarily also gen.) pl. *vlâsih* is probably the original form, as the type with retraction and neo-acute penultimate vowel fits excellently in the preceding group (b), and as this type does not occur in disyllabic words with a short penultimate vowel: *kôren, kôrena*, loc. pl. *kôrenih* and *korenih* (not *\*korênih*); cf. Belić, Izv. 14, p. 210. Štok. *zûb, zûba*, etc., pl. nom. *zûbi*, acc. *zûbe*, gen. *zûbā*, dat.-instr. loc. *zûbima* surely represent the same accentuation which we have observed in Russian, Slovene, Kajkavian, Čakavian.

Slovincian also shows end-stress in the genitive, dative, instrumental and locative plural in the mobile type:

1	<i>břég</i>	This accentual paradigm may agree fully with Russian. But it must be remembered that in Slovincian the barytonised forms may go back to original endstressed forms.
2	<i>břiegû</i>	
3	<i>břiegû</i>	
4	<i>břég</i>	
5	<i>břiegq</i>	
6	<i>břegû</i>	
7	<i>břieži</i>	
8	<i>břegóu</i>	
9	<i>břegóum</i>	
10	<i>břieži</i>	
11	<i>břegamí</i>	
12	<i>břegāx</i>	
13	<i>břiega</i>	
14	<i>břiegoma</i>	

The comparisons I have made allow us to set up the following proto-Slavonic schema, which I have placed side by side with the Lithuanian for comparison:

<i>*zôbo</i>	Lith. <i>kélmā</i>
<i>*zôba</i>	= » <i>kélmo</i>
<i>*zôbu</i>	= » <i>kélmui</i>
<i>*zôbo</i>	= » <i>kélmaq</i>

<i>*zôbom̃</i>	Lith. <i>kélmū</i>
<i>*zôbē</i>	» <i>kélmē</i>
<i>*zôbi</i>	but: » <i>kelmaĩ</i>
<i>*zôbo</i>	= » <i>kelmū</i>
<i>*zôbom̃</i>	≠ » <i>kelmāms</i>
<i>*zôby</i>	= » <i>kélmus</i>
<i>*zôbū</i>	= » <i>kelmaĩs</i>
<i>*zôbēx̃</i>	» <i>kelmuosē</i>
<i>*zôba</i>	= » <i>kélmū</i>

As the mobile type is marginal in Slavonic (cf. R. *сковородѣ: скѡвороду; лошадѣ: лошадѣмū*) I assume that the stress in the oblique cases in the plural rested on the ending, i.e. that in the locative plur. we originally had *\*zôbēx̃*. Retraction from final stressed *-z̃* explains the neo-acute of *ě<sup>55</sup>*.

In the dat. pl. *\*zôbom̃*, according to the sound laws, the early proto-Slavonic ictus may have been on the *-o-* as well as on the ending *-m̃*. From a structural point of view the latter is more probable (*\*zôbom̃*). The former would agree with Lithuanian.

Here, too, the proto-Slavonic paradigm I have set up shows agreements with Lithuanian of such a characteristic nature that it is impossible to regard them as accidental.

Certain deviations naturally occur. In the instr. sing. we find root-stress in both instances, but the endings are different. In the loc. sing. Lithuanian has the ending *-e* < *\*-é*. There is a difference between the dialects in the stress of this form. The ending must, I believe, have arisen from *-ie* (or from an earlier stage in the phonetic development of this ending, e.g. *ē*)<sup>56</sup> plus the same *\*ē*<sup>57</sup> which we find in the *-oj-e* of the *ā*-stems. In the dialect in Buividze, where the old locative in *-ie* is still preserved as an optional form besides a form in *-ī*, we find, according to Gauthiot, *vilkiē, miškiē* (mobile words) and even *pāniē* (immobile). In this instance there seems to be a difference between Baltic and Slavonic.

In the nom. pl., too, there is a difference, though admittedly the Lithuanian *-ai*-ending is not quite clear. But the adjectives have *-i* < *\*-ie*, and this ending, whose origin is obvious, is stressed in the mobile words (*minkšti*, etc.).

In the locative pl. the old ending has been transformed in Baltic. Here we should have expected an ending *-iesu* which occurs in the adverb *keturiesu* («with three companions»). The stress in this isolated adverb cannot be decisive. The modern form in *-uose* is end-stressed in the mobile words. The form is a modification of Old Lithuanian *-uosu*. In Lazūnai we find another modification of this form: *ažaruosui*, which suggests an earlier end-stressed *-su* in the mobile form, cf. *ūpėsui* (immobile)<sup>58</sup>. Even though

the case may not be quite clear, end-stress in the forms in *-su*, for which we have evidence in the *ā*-stems in East Lithuanian, seems probable.

In the nom. sing. the identity between Slavonic and Baltic is probably secondary. Lithuanian *minkštasis, gerasis* suggest old end-stress. In Slavonic the form of the accusative may have triumphed.

The secondary cases — allative, illative and adessive — have stress on the thematic vowel in Lithuanian (in the illative singular on *-à* in *-anà* whence *-añ*). With regard to this point see under *ā*-stems (page 69).

I consider therefore that it is possible to construct a common Balto-Slavonic pattern which would appear like this (I indicates stress, x lack of stress):

	Sing.	Plural	Dual
Nom.	XI(?)	?	IX
Gen.	IX	XI	?
Dat.	IX	XXI(?)	XI(?)
Acc.	IX	IX	
Instr.	?	XI(?)	
Loc.	?	XXI	

Note. Not infrequently in older Russian, examples of root-stress are to be found in accented texts in the dat. and loc. pl. (I have dealt with the instr. above). A certain number of these are locatives which have the Church Slavonic form (with «second palatalisation»), and where consequently the accentuation too is Church Slavonic. A characteristic feature of the pure Church Slavonic forms in Russ. Ch. Sl. is a tendency to stabilisation of the accent. To this form type belong e.g., *вѣцехъ* (Učeniye i chitrost' 199a,) *слѣзъхъ* (Smotrickij 54), besides *слогѣхъ* (Smotrickij 54), *бѣзъхъ*, *ѡбозехъ* (Toržestv., 16th century, see Vasiljev, Kamora p. 25 ff), *бѣзъхъ* (the Ostrog Bible, Ex. 12), *рѣзъхъ* (the Bible 1663 Apoc. 13), *дѣстъхъ* (the Bible 1663 Matt. 10). These instances do not concern us here.

Furthermore, examples of root-stress are to be found in such *īo*-stems which were originally *i*-stems: *зѡстехъ* (Uloženiye 334b), *зѡстем* (Domostroj 58), *зѡстехъ* (ibid. 64). These cases are almost certainly of the same type as *дѣтемъ*, *дѣтмехъ*; *лѣдемъ*, *лѣдмехъ* of which we shall say more later on.

Finally, we find a number of examples in *o*-stems, especially in the locative: *зрѡбехъ* (the Ostrog Bible, Gen. 23, etc.), *вѡ зрѡбъхъ* (Ups. Ksl. 11, Psaltery 16th century according to Vasiljev l.c.), *рѡдъхъ* (Smotr. 332), *ѡрѡдъхъ* (Donat; Jagić, Codex, 533), *ѡрѡдъхъ* (Ostr. Bible, Gen. 17, 25, etc.), *лѣсъхъ* (Korm. 1650, 152b), *ѡ зрадъхъ* (Donat, Jagić, op.cit.), *лѣнъхъ* (Ups., Ksl. Fol. 17, 11b; Stoglav cf. Buslajev 803), *кнѣземъ* (Domostroj 7), *ѡ зромехъ* (Psalt. 16th century, according to Vasiljev l.c.), *вѡ кровехъ*, *вѡ*

*гласъхъ* (ibid.), *зубомъ*, *дрѹгомъ* (beside more frequent end-stress, Novg. Lětop., see Vasiljev op. cit. p. 124), *дѡмъхъ* (Smotr. besides *домѡмъ*) and others. This is not a case of a one-syllable retraction with neo-acute as in *во дѡрѡхъ*, *на конъхъ*. We are concerned here with «mobile» first-syllable stress, with transference of ictus to the preposition: *вѡ зрѡбъхъ*, *ѡрѡдъхъ*, etc. That we are not dealing here with a purely literary accentuation (Church Slavonic or possibly Ukrainian), is shown by the fact that loc. in *-ъхъ* with root-stress seems to be the basis for certain dialectal Great Russian forms, with a soft consonant in front of the locative ending *-ахъ*: *в глѣзяхъ* (Vladim.), *в лѹзяхъ* (Oneg., Kargop., Petroz., etc., and also occasionally in folk songs), *в лѣсяхъ* (Petroz., Poven. . .), see Obnorskij, Imennoje sklonenije II p. 365 f. It seems probable, in my opinion, that we are here dealing with a tendency to immobilise the paradigm, viz. a retraction due to the influence of the nom.-acc. pl. similar to what I believe must have taken place in the instrumental.

Russian, as is well known, possesses yet another mobile type in the *o*-declension, the chief characteristic of which is end-stress throughout the plural. It is improbable that this type, which is limited to certain words, could simply have been derived from the preceding, with generalisation of end-stress in the plural. A study of the older accentuated texts shows that this type still occurs very rarely in the middle of the 17th century. Thus we find in Učeniye i chitrost' (1647): *дѣры*, *сыны*, *нѹды* (Stang, p. 17). The words *рядъ*, *тинъ*, and *шахъ* (= *шагъ*) fluctuate between root-stress and end-stress in the nom.-acc. pl. In Uloženiye (1649) we find *дѡлги* 39a, 112ab besides *долги* 128a, *лоуги* 4a, etc., besides *луги*, 77a, *мѡсты* 6b besides *мосты* 88a, *носы* 336b, *пины* 44b, etc., besides *пины* 79b. This type (which I shall call «mob. B» as opposed to the «A» type already dealt with) constantly includes in Uč. i chitr. *стѣнъ*, in Uloženiye *стѣнъ* and *рядъ*. Triod' (1621) has: *дѣры* 492b, *цѣѣты* 78a; Kormčaja (1650): *дѣры* 285a, *пины* 276a, *цѣѣты* 258b, but acc. pl. *пирѣ* 83b; Stoglav (17th century, Busl. 803ff): *дѣры*; the Russian-Byzantine phrase-book edited by Vasmer: *валы* but *мѣхи*, etc.<sup>59</sup>

During the 17th and 18th centuries, however, this type becomes more widespread, and affects a great many loanwords as well. In modern literary Russian type B includes: *бал*, *бор*, *воз*, *вес*, *верхъ*, *зрѡбъ* (besides *зрѡбѣ* and *зрѡбы*), *дар*, *долг*, *дуб*, *духъ* (-и: «perfumes»), *жаръ*, *жиръ*, *задъ*, *зѡбъ*, *квасъ*, *кругъ*, *ладъ*, *медъ*, *миръ*, *мозгъ*, *мехъ*, *носъ*, *низъ*, *полъ* (floor), *пунъ*, *паръ*, *передъ*, *пайъ*, *пудъ*, *пиръ*, *разъ*, *райъ*, *ройъ*, *рядъ*, *садъ*, *стогъ*, *складъ*, *слойъ*, *сыръ*, *следъ*, *сынъ*, *торгъ*, *фунтъ*, *хлебъ*, *гасъ*, *ганъ*, *гайъ*, *цветъ*, *шагъ*, *шелкъ* . . .

Nachtigall maintains in Akzentbewegungen der russ. Formen- und Wortbildung I, 1922 (printed in 1912) p. 146 that the stressed *-ы* in the nom.-acc. pl. in type B represented partly the old accusative ending, where the original acute attracted ictus according to de Saussure's law, and

partly the old dual ending *-y* of the *u*-stems, which — likewise according to de Saussure's law — should attract ictus. He points out that in the type here treated we are largely dealing with old *u*-stems. On this basis this accentuation has then spread, leaving practically unaffected words denoting persons (cf. *бóгу*: *богóв*; *вóры*: *ворóв*), where the stress of the nominative triumphed. It should be added, however, that in a note at the end of the book (p. 264) the author withdraws the first point — acute ending in the acc. pl. — and states that the ending in the acc. pl. was circumflex.

I do not believe that Nachtigall's explanation can be right in either of its versions. I do not believe that de Saussure's law operated in Slavonic, and unless this is assumed, neither the acc. pl. nor the dual of the *u*-stems can have given rise to type B. In Lithuanian both these forms have root-stress in words where de Saussure's law did not operate: *kélmus*, *sūnus*, *sūnu*. Furthermore the acc. pl. has root-stress in the other mobile patterns (*зубы*, *кóсти*, *гóловы*). Nachtigall explains this p. 104 as the stress of the nominative. But Serbo-Croat., where nom. and acc. pl. are kept separate, has root-stress in the acc. pl. of words with mobile stress, as for example in Dubrovnik: nom. pl. *sūhi*, acc. *sūhe* in the mobile adjectives. To support his theory that the dual of the *u*-stems formed the basis of the plural forms, Nachtigall adduces the type *бéрег*: *бepéá* . . . But even this part of his explanation seems, in my opinion, unsatisfactory. I cannot envisage the possibility of the dual having made any real contribution to the type *бéрег*: *бepéá* (cf. above, p. 21). As Unbegaun states (*La langue russe au 16<sup>ième</sup> siècle* p. 214), the dual disappears in Russian already in the thirteenth-fourteenth century, while nom. pl. in *-á*, *-á* does not become widespread until the 18th century.

In his review of Nachtigall's book in *Slavia* II p. 726 f., Kulbakin suggests an approach which Nachtigall himself abandoned in his note at the end of the book. He completely rejects Nachtigall's point, that the words concerned in this instance are largely old *u*-stems, and assumes that the stressed *-ы* is the acc. ending of the *o*-stems, which has had acute intonation and attracted ictus according to de Saussure's law. The type *бóгу*, *вóры* has, in his opinion, preserved the stress of the nominative, and he bases his argument on the fact that most nouns denoting persons belong to this type. I have already refuted this argument as far as its phonetic basis is concerned. But in addition it should be noted that many words of the type *зубы* — *зубóв* denote something inanimate. In considering *зóроды*, *лúги*, *рóсты*, *сóрты* to be «сомнительны», as the usual forms are *зopодá*, *лyгá* . . . Kulbakin fails to take into account the older accented texts, where forms such as *зóроды* are quite regular, and where we find a number of words denoting inanimates which have this accentual type, for example *лбсы*, *дáры*, etc.

Obnorskij, *Именное склонение* II (1931), p. 47 f, considers forms in *-ы* as the genuine Russian forms of the old acc. The nom. originally had root-stress, and the acc. has triumphed. He considers the type *зубы* — *зубóв* to be of Church Slavonic origin, which hardly agrees with its widespread use in purely secular words both in former and more recent times.

On this last question Obnorskij shares the same views as Šachmatov, *Очерк современного русского литературного языка* (1925) p. 105 f, who maintains that the type in *-á* (*зopодá*), which he traces back to old dual, is the one that was to be expected in all words in Russian. The type *зубы* — *зубóв* is partly Church Slavonic, and partly occurs in forms which have preserved the old accentuation of the nom. (*вóлки*, *бóги*, *ббсы*, *тpусы*, etc., *вóлосы*, *зубы*, etc.), while the type in *-ы* comprises not only words which are incapable of forming a dual, and therefore cannot take the ending *-á* (*меды*, *тáи*, *шелкú*), but also some literary words and other more recent words (*шкáпы*, *балы*, *наны*, *рай*, *слóи*) and finally duals in *-ы* from the *u*-stems (*сады*, *тины*, *мирý*, *дары*, *валы*, *станы*, *верхú*, *низы*, *задý*.) It may be seen that his views and Nachtigall's have many points in common, and raise the same objections.

Nevertheless I am of the opinion that Nachtigall and Šachmatov (cf. also Bulachovskij, *Истор. комм.* p. 92) must have been right at any rate on one point, viz. that there is a certain relationship between type B and the old *u*-stems.

The following are my reasons for supposing this:

1. Of the words belonging to this type a number are undoubtedly old *u*-stems:

*верх*: cf. Lith.: *viršùs*

*сын*: cf. Lith.: *sūnùs*, Sanskr. *sūnùh*, Gothic *sunus*.

*мед*: cf. Lith.: *medùs*, Sanskr. *mádhu*, Greek *μέθυ*.

No Slavonic idiom, not even Church Slavonic, makes a clear distinction between the old *o*- and *u*-stems. For this reason it is impossible to say with any real certainty which words were *u*-stems, and the lists drawn up by the various scholars all differ. According to Diels, *Altkirchensl. Gramm.* § 62, notes 2, 6, 10, 13 the following words exhibit in Old Church Slavonic a certain number of endings from the *u*-stems. (I have not taken into account gen. pl. in *-овъ*, as it was particularly productive, nor have I dealt with dat. sing. in *-ови* which was productive in words denoting persons): *домъ*, *полъ* (a half), *врэхъ*, *волъ*, *долъ*, *медъ*, *чínъ*, *родъ*, *jadъ*, *glasъ*, *mirъ*, *редъ*, *длгъ*, *сынъ* (son), *санъ*, *synъ* (tower), *добъ*, *станъ*, *гръмъ*, *духъ*, *даръ*, *поръ*, *садъ*, *сѣдъ*, *удъ*, *грѣхъ*, *гроздъ*. Of these 27 words 11 belong to type B in Russian. Of course, I do not for a moment suggest

that all these words were *u*-stems in proto-Slavonic; but the list suggests that there is a certain relationship between the *u*-endings and type B. As we have seen, some of the words are quite clearly old *u*-stems. Others may later have been influenced by the *u*-declension. Russian-Church Slavonic, too, has *u*-forms in several words which in modern Russian are of type B, some of which are missing in our Old Church Slavonic list, e.g. *нѣрѣ* (Korm. 1650, 29a, 78a), *шѣровѣж* (Chronogr. 145), *дарми* (ibid. 59) *шарми* (ibid. 96), *дарми* (Ups. Ksl. fol. 17, 11b).

2. Type B only comprises words with a monosyllabic stem, while type A also includes polysyllabic words. There must be a reason for this, and we are reminded of the fact that the words which in the Slavonic languages appear to have belonged to the *u*-stems all have monosyllabic stems.

But if a relationship of this kind exists between the *u*-stems and type B, then the next question that arises is: what exactly is the nature of this relationship?

It might of course be possible that the basis for type B was constantly end-stressed *u*-stems, but in that case we shall have to explain why the accentuation *дары*, *цѣны* predominates in older times. Certainly, we find the adverbial formations Old Russian *сверхѹ*, (*кверхѹ*), etc., beside *сѣрху* (*к ѣрху*), but this need only imply that in the mobile paradigm the gen. sing. once belonged to the end-stressed forms, which may also be assumed to have been the case with the *i*-stems, cf. Old Russian *спередѹ*, (*noneпередѹ*); cf. also Lith. *sūnaiš*, *aviš*. The dative may have acquired end-stress (due to the influence of the genitive) especially in these and similar adverbial formations. Another possibility is that the word *верх* did in fact belong to the constantly end-stressed *u*-stems. (See below.) But the material that has come down to us makes it unlikely that this applied to the whole group.

Another peculiarity which is characteristic of a number of these words should also be borne in mind, viz. the gen. sing. in *-á*, especially after the numerals 2, 3 and 4, but not only here: *рядá* (cf. Uč. i chitrost' *два, три, четыре рядá*; *оувсякого рядá*; *промежь всякого рядá*, Stang op. cit. p. 12 f.); *разá* (*два разá*, *дать кому разá*), *два шагá*, *ш(к)афá*, *шарá*.<sup>60, 61</sup>

These have been explained as dual forms, which, in contrast to the gen. sing. of the same words, had end-stress according to de Saussure's law. But the fact that end-stress also occurs in words of this kind when not used in connection with the numerals «two», «three», and «four», suggests that they must be regarded as genitives in origin.

A third peculiarity of these words is the occasional occurrence of end-stress in the instr. sing. We have for instance the adverbial expressions *кружѣм*, *шарѣм*, *верхѣм*. In the case of the only word which is accented exclusively according to the pattern of type B in Učeniye i Chitr., we find

beside instr. sing. *стáномъ* 183a, etc., also *передстанѣмъ* (three times, 170b, 180b, 181b). We also find *задѣмъ* 97a, *передѣмъ* 79b, *цѣномъ* 21b beside *цѣномъ* 10a. In Chron. we find *садѣмъ рáзума*, p. 12 («the tree of knowledge»).

I believe that the whole question is bound up with the problem of the accentuation of the *u*-stems in proto-Slavonic and the part they have played in Russian.

It must be assumed that the proto-Slavonic *u*-stems, like the other stem-classes included a root-stressed, an end-stressed, and a mobile type. I postulate the first type on purely theoretical grounds, as no example exists in Baltic or Slavonic. In view of the agreement with Lithuanian which we have found in the *ā*- and *o*-stems, the following mobile pattern may be set up: *\*dār̥z*, *\*dāru* probably for older *\*darū* (cf. Lith. *sūnaiš* and the accentuation *садѣмый*, *домѣмый*, *медѣмый*), *\*dārovi*, *\*dār̥z*, *\*darim̥* (cf. Lith. *sūnumi*), *\*darū*; *\*dārove*, *\*darōvz*, *\*darim̥z*, *\*dāry* (Lith. *sūnus*), *\*darim̥i* (Lith. *sūnumis*), *\*dar̥x̥z*; *\*dāry* (Lith. *sūnu*). Cf. the accentuation *сѣнове*, *сынѣвъ*, *сынѣмъ* (*-овѣмъ*), *сѣны*, *сынмѣ*, *сынѣхъ* in Russian Church Slavonic printed texts from the middle of the 16th century referred to by Velikanov R.F. V. 62, p. 219. At an early stage certain mobile *o*-stems joined this declension.

At the same time a columnally end-stressed type must have existed, to which e.g. *верхъ* probably belonged. I am here referring to the adverbial formations mentioned above, cf. *сверхѹ*, *кверхѹ* (Učeniye i chitrost', cf. Stang p. 13), furthermore *доверхѹ* (Bible 1663 Luke 4, Chron. 99), *омверхѹ* (Ups. Slav. 22), which can, however, also be explained in another way, and furthermore to *верцѹ* (Bible 1663 Gen. 8); cf. the constant end-stress of *верх* in Ukrainian (Smal'-Stocky — Gartner p. 214) and Serbo-Croatian *vřh* (gen. *vřha*). Another *u*-stem which may have belonged to the end-stressed group is *морз*, cf. *до морзѹ* (Chron. 71), *но морзѹ* (ibid. 107), *морá* (the Bible 1663 Acts 28), cf. also the end-stress in Ukrainian (see Smal'-Stocky, p. 227). When the dual went out of use, the old dual form of the *o*-stems, which was still used after *два*, *оба*, was identified with the gen. sing. In the *u*-stems this could not take place. The dual in *-y* coincided with the acc. pl., thus creating a break in the system. Therefore a new genitive form in *-a* was created. This was mainly — but not exclusively — used after numerals («two», later «three», «four»).

I now assume that the mobile *u*-stems, under the influence of instr. and loc. sing. in *-ѣмъ*, *-ѹ* in opposition to the unstressed *-омъ*, *-ѣ* of the mobile *o*-stems, and at the same time under the influence of the end-stressed *u*-stems, carried out end-stress of the secondary *-a*-form and later also of the nom. acc. pl. in *-ы*, maybe particularly influenced by the fact that the *á*-form was specially used after «two», «three» («four»). All

this must have happened at a time when the *u*-stems still formed a comparatively well-defined group in Russian. When the *u*-endings in the gen. and loc. sing. became more widespread, end-stress was also introduced into the nom.-acc. pl. in many other words. And yet we only find it in a few words in texts from the 17th century, while root-stress predominated. The reason for this must be that the accentuation *ряды, тины, шаги, дары*, which is based on the existence of the *u*-stems as a group, and therefore on older linguistic states than those to be found in our texts, had established itself in the spoken language some time before its acceptance in the written. Here, too, no doubt, the ecclesiastical pronunciation helped to preserve the original accentuation. As time went on more and more words joined this group, e.g. *тасъ*, originally an end-stressed *o*-stem, and many loan-words. It looks as if the spread of this type was arrested by the fact that a rival arose at about the end of the 17th century — the plural form in *-á*.

It is striking that an obvious *u*-stem such as *дом* conforms to type A (until it acquires a new nom.-acc. pl. in *-á*). I am unable to explain this.

## 2. Neuter.

Here too we find three types:

### a. Constant root-stress.

Root-stressed neuters have acute root-syllable. From Russian we know e.g. *зѣло* = Serbo-Croatian *gъlo*. In Russian the bulk of these words have passed over by analogy to the mobile type, after the difference of intonation had disappeared. Cf. *лѣто*: *летá*, older *лѣта*. As examples Čakavian and Slovene paradigms may serve: Čak. Novi) *rǎlo, rǎla, rǎlu*, etc., *rǎla, rǎl, rǎlōn, rǎli, rǎlih*. Slovene: *lěto, lěta, lětu, lětom, lěti; lěta, lět, lětom, lěti, lětih; lěti, lětoma*.

The secondary circumflex in the gen. pl. is proto-Slavonic (see p. 24 f). In Slovene we regularly get secondary circumflex (neo-circumflex) in the loc. and instr. pl., because here the ending had a long vowel. Circumflex has spread to the nom.-acc. and dat. pl. The basis for this is the paradigm which we find in Kajkavian (Prigorje): *šilo, šila* .. pl. *šila, šil, šilam, šili, šili* (see Rožić, Rad 115, p. 117).

### b. Stress on the final syllable of the stem.

Words of this type accent the ending in the singular. In proto-Slavonic the stress in the loc. pl. was retracted, in conformity with the sound-laws, back to the vowel of the preceding syllable and produced neo-acute (cf. masc. p. 69 f). By analogy the accentuation of the locative has spread to the remaining cases of the plural (not to the dual, as can be seen from Slovene).

The reason why the locative has been in a position to effect such considerable changes is that the mobile neuter words had a parallel mobility: accentuation on the first syllable in the whole singular, and on the final syllable in the whole plural.

Thus we find:

Russ. <i>винó</i>	Čak. (Novi) <i>krilǎ</i>	Slov. <i>ókno</i>
<i>винá</i>		<i>ókna</i>
<i>винý</i>		<i>óknu</i>
<i>винóм</i>		<i>óknom</i>
<i>винé</i>		<i>óknu</i>
<i>вина</i>	<i>krila</i>	<i>ókna</i>
<i>вин</i>	<i>kril</i>	<i>ókān</i>
<i>винам</i> (older R. <i>-омъ</i> )		<i>óknom</i>
<i>винами</i> (o. R. <i>-ы</i> )		<i>ókni</i>
<i>винах</i> (o. R. <i>-ъхъ</i> )		<i>óknih</i>
		<i>ókni</i>
		<i>óknomā</i>

Cf. Bulg. (dial. of Razlog) *сѣла, влákна, зрѣна* besides end-stressed nom.-acc. sg. (Kodov: *Подвижното бълг. ударение* p. 60).

In polysyllables, as already mentioned, there is a retraction of one syllable: R. *решетó: решѣта, веретенó: веретѣна*; Čak. *propǎlǎ: propǎla, provǎslǎ: provǎsla*.

Slovene *ókni, óknoma* as well as older Russian *крыль* (e.g. in Učeniye i Chitrost' 108b, etc.) shows that retraction does not reach the dual.

In certain Serbo-Croatian dialects we find retraction only in cases where it also occurs in the «end-stressed» masculine declension: *sěla*: loc. *sělije* like *kòni: kǎnije* (Lika, cf. Belić, Roczn. Sl. I, p. 199)<sup>62</sup>, *selǎ* — pl. *selǎ*, loc. *sělih* (Brusje, cf. Hraste, Južnosl. fil. VI, p. 192); *selǎ*, pl. *selǎ, sěl, selǎm, selǎ, sěli* (-i?), *sělih* (cf. *otǎc; ocǎ, đci, đcih*), Quarnero Island, cf. Milčetić, Rad. 121, p. 119. There are hardly any grounds for regarding this as a direct continuation of the situation which preceded the generalisation of paroxytonesis which we find in other Serbo-Croatian dialects and in Russian and Slovene. Owing to the agreement between the other Serbo-Croatian dialects, Slovene, Russian and to a certain extent Bulgarian, I am more inclined to regard the general retraction as having been carried out already in proto-Slavonic times. The state of affairs which we come across in Lika, Brusje, etc., is more probably a secondary re-introduction of end-stress due to the influence of the sing. in cases where end-stressed masculine words have oxytonesis.



## c. Mobile stress.

The words which come under this heading have an interchange of ictus between first and last syllable, skipping any medial syllables. This paradigm is best preserved in Russian and Štokavian. The agreement we find here shows that the type is proto-Slavonic. Russian shows skipping of medial syllables in words such as *зѣркало*: *зеркалѧ*; cf. also Serbo-Croatian *jězero*, nom.-acc. pl. *j zěra* (Dubrovnik), place name *žezěra* (cf. Belić, Istorija srbohrv. jez.).

Russian	<i>пѡле</i>	Serbo-Croatian	<i>pǒlje</i>
	<i>пѡля</i>		<i>pǒlja</i>
	<i>пѡлю</i>		<i>pǒlju</i>
	<i>пѡлем</i>		<i>pǒljet</i>
	<i>пѡле</i>		<i>pǒlju</i>
	<i>поля</i>		<i>pǒlja</i>
	<i>полѣй</i>		<i>pǒljā</i>
	<i>полѣм</i>		
	<i>полѣми</i>		<i>pǒljima</i>
	<i>полѣх</i>		

In the same way we find Serbo-Croatian (Štok.) *jāje*: *jāja*; *drijevo*: *drijěva*; *měso*: *měsa*; *břdo*: *břda*; *dřvo*: *dřva* (Leskien Gr. p. 353).

Note 1. Čak. (Novi) *jāje*: *jāja*, *sūnce*: *sūnca*, *jělito*: *jelita* must, I assume, have secondary dialectal retraction; cf. *jōjā* in Brusje (Hvar) according to Hrašte, Južnosl. fil. VI, p. 193, as well as the state of affairs in Štokavian and Russian. Belić considers the accentuation in Novi as the original. I should like to point out that in the type *vlās* we find in the gen.-loc. pl. a preference for the accentuation *vlāsih* (from type b) to *vlāsih* which in my opinion is older, cf. p. 74. The remaining plural forms may have acquired their accentuation on the basis of loc. pl. *jājih*, *jelitih*, etc.

Note 2. The fact that in older Russian in words of this type we occasionally find stress on the first syllable in the loc. pl. is an entirely different phenomenon. Here the accent is retracted to a preceding preposition. There is consequently no possibility of a neo-acute in this instance. Some of these forms are undoubtedly Church Slavonic: *в мѡрихъ* 104b, *в мѡрихъ* 103b (Ups. Ksl. Fol. 3 Psalt. 1630), *в мѡрихъ* (Triod' 1621, 21a), *дрѣвѣхъ* (Korm. 1650, 152b). Others I find it exceedingly difficult to explain. We have, for example, *пѡлехъ* (Uč. i chitr. 91a), *слѡвехъ* (Donat, Jagić, Codex p. 530), *на полехъ*, *на морѣхъ* (Psalt.; Vasiljev, Kamora p. 36), *въ мѡрѣхъ* Gen. 1., *вѡлехъ* Ex. 1 (Ostrog Bible). Cf. the dialect in Spas-Deminskoje: *pól'ā*: *pól'á* but *pól'ex* (Broch, Govory k zap. ot Mosál'ska, p. 112). Similarly we find in the consonant stems: *именехъ* (Smotrickij 116, etc.), *на небесѣхъ* (Triod', 1621, 120b and others), *ѡ временехъ* (Donat, Jagić op. cit. p. 533). Some scholars may object that the nom.-acc.

pl., being formed from an *ā*-stem, need not have the same stress as the other cases in the plural, as these, like the singular, belong to the *o*-stem. Thus it might be possible that the oblique cases in the plural originally had the same stress as in the singular. An argument against this is furnished by the occurrences of end-stress which we encounter in the oblique cases in older texts, e.g. *во оуцѣхъ* (Ups. Ksl. Fol. 3 1630, 105a), *спамѡмъ* Triod' 1621, 475b); cf. furthermore Slovincian *kùelo*: pl. *kùela*, *kólul*, *kolbum*, *kùela*, *kolamí*, *kolāx*.

## i-stems

Here, too, we can distinguish between root-stressed, end-stressed and mobiles.

## a. Constant root-stress.

This type is rare, but is easily recognised. We find it, for example, in Russian *нѣтъ*, Serbo-Croatian *nīt*, *mǎd*, *smǎrt*, etc. In Slovene, words such as e.g. *mǎš*, gen. *mǎši*, instr. *mǎšjo* (Breznik, Gr. § 173), belong to it. I find it more difficult to understand *nīt*, gen. *nīti*, etc., where circumflexion has been introduced in Slovene and in Kajkavian (Prigorje). One can envisage *i* as the result of a regular phonetic development in the instr. sing. *nītjo*, in the gen. pl. with *-i* < *-ī* < *-ijb*, in the instr. pl. *nītmi*, and in the loc. *nītih*. This might provide a point de départ for circumflexion. In Slovincian we find for instance *māš*, *māšā* . . , pl. *māšā*, *māši*, *māšim* (-*oum*), *māšmī* (-*amī*), *māšax*. *Nācā*, *pīersā*, etc., are declined in the same way.

In most Old Russian and Russian-Church Slavonic texts *дѡепъ* has constant root stress; thus in the plural we find: *дѡѣпу*, *дѡѣпей*, *дѡѣпемъ*, *дѡѣрѣми*, *дѡѣрѣхъ*. There is an abundance of examples<sup>63</sup>. The reason for this stress is not quite clear to me. According to the sound-laws, the declension should have been: *\*dvef*, *\*dvri*, *\*dvefu*; pl. *\*dvri*, *\*dvrej*, *\*dvrem*, *\*dvermi*, *\*dvrex*. The stem *дѡеп-* must have been generalised on the basis of the nom.-acc. sing., instr. sing. and pl. The stress of the modified forms cannot be expected to throw any light on the proto-Slavonic stress of this word. It must be noted, however, that Slovincian *dvjěřā*, gen. *dvjěři*, instr. *dvjěrmī* (Lorentz, Slowinz. Wb. p. 221)<sup>64</sup> also has root-stress.

## b. Stress on the final syllable of the stem.

This type is represented in Russian by *нѣтъ*. This word, which is the only preserved masculine *i*-stem, has retained the old accentuation. Serbo-Croatian *pūt*, gen. *pūta*, which has become an *o*-stem, has also retained the old end-stress (cf. Čak. *pūt* : *pūtā*). Polish *pać*, gen. *pacia* with its *a*, also suggests old end-stress. This type originally had a columnal stress on the suffix *-i-*. This clearly appears from the instr. pl. *ноѣмѣми* 68b besides acc. pl. *моѣмѣ* 67a in the Čudov N.T.

## c. Mobile stress.

A glance, especially at Russian and Slovincian, shows us a mobile pattern largely corresponding to the one we find in the case of the *ā*-stems. This pattern may be set up as follows:

Russ.	Slovene	Štok.	Slovincian
кость	kôst	stvâr	vûes — xûeresc
кóсти	kostî	stvâri	vûesä — xûerescä
кóсти	kósti	stvâri	vûesî — xûerescî
кость	kôst	stvâr	vûes — xûeresc
кóстью	kostjô	stvârju	vûesou — xerûescou
кóсти ; в cтенѣ	kósti	stvâri	vûesî — xerûescî(-scä)
кóсти	kostî	stvâri	vûesä — xûerescä
костѣй	kostî	stvârî	vôsî — xerûesc(î)
костѣм, O.R.-ѣмъ	kostêm		vôsôm — xerûescôm
костѣмъ(-ѣми)	kostmî	stvârîma	vôsîmî — xerûescmî
костѣх, O.R.-ѣхъ	kostêh	[telâdma]	vôsâx — xerûescax
	Du.: kostî, kostêma		xûerescî

All these languages show root-stress in the singular, except in the locative, where we find end-stress, cf. Russ. в cтенѣ, Štok. stvâri, Slovincian xerûescî (< \*xorostî), and — in the case of Slovene and to a certain extent Slovincian — in the instr. sing. Similarly they all have stress on the first syllable in the nom.-acc. sing. (in polysyllabic and disyllabic words), in the nom.-acc. pl. and — in Slovene and Slovincian — in the nom.-acc. dual. All the languages have end-stress in the gen., instr. and loc. pl. In the loc. pl., however, Slovene and Slovincian, and, in the dat. pl., Slovene, have borrowed their endings from other stem-types (*o*-, *ā*- and *io*- declension). In the dat. pl. Russian and Slovincian have end-stress. On this basis I believe it is possible to construct a proto-Slavonic declension on these lines:

*kôstb	but: Lith. širdis
*kôsti or *kosti (se below)	» širdiēs
*kôsti	= » širdie (dial).
*kôstb	= » širdi
*kostjô (?)	» širdimî, širdžia
*kosti	» širdyè
*kôsti	» širdys
*kostjô	» širdziū
*kostbm̃	≠ » širdims < -imus
*kôsti	= » širdis
*kostmî	= » širdimîs
*kostbx̃	» širdysè : cf. adv. akisù
*kôsti	= » širdi
*kostmà	Lith. instr. širdim̃ ; but dat. širdim̃.

The similarity with Lithuanian is marked in this case too. In the nom. sing. Lithuanian has end-stress, but Slavonic root-stress. Probably Slavonic has generalised the stress of the accusative (otherwise we would, for example, have expected forms like «волóсть» instead of во́лость). In the gen. sing. there is a characteristic difference: the Slavonic languages show root-stress, Lithuanian end-stress. We come across the same difference in the *u*-declension (see above, p. 80): Russ. мѣду — Lith. medaũs. In the instr. sing. Lith. has preserved the older ending, which is preserved in Slavonic only in the masculine *i*-stems, cf. Church-Slav. рѣтъ, instr. sg. рѣтъмъ — Russ. нымѣм. Where Lithuanian introduces \*-ą secondarily, the stress agrees with Russian. It is difficult to decide which stress is the older in this case — the Russian or the one we find in Slovene. In the loc. sing. Lith. has here, as in the other stems, formed a new ending in \*-ę. The first component of the ending, -yj-, is due to analogy. In Slavonic the form of the nom. pl. F. has been taken over from the acc., while Lithuanian shows an innovation of a different kind. In the dat. pl. the same possibilities exist as in the *ā*- and *o*-stems: Slav. \*kostbm̃ may theoretically correspond to Lith. širdim̃(u)s. But \*kostm̃, too, may be the basis for the Slav. form, and this would agree best with the whole system. In the loc. pl. the modern Lith. form širdysè is an innovation, while the adverbial form akisù, as well as the East Lithuanian akysù, show end-stress, which may agree completely with Slavonic.

First and foremost, the gen. sing. presents a problem. Here we find root-stress in Slavonic and end-stress in Lithuanian. In Russian, however, we find certain peculiar forms with stressed -ú. The word рѣдъ has the form рѣдú besides рѣду in the gen. and dat. sing. Serbo-Croatian nom.-acc. pl. grūdī (gen. pl. grūdī) has mobile accentuation, and the Czech word hrud' too (with short vowel) would seem to invalidate the possibility of this word originally belonging to type b<sup>65</sup>.

Occasionally in Russian, after the prepositions из and до, we find end-stress in the gen. sing. of the *i*-stems: beside IIIеру, нѣру, рѣзу we find из IIIеру́, из нѣу́, из рѣзу́, до нѣу́, до cтену́, до кóстѣ (see Kuryłowicz, Accentuation, p. 265). In place-names such as IIIеръ it is difficult to know whether we are faced with an old end-stressed word of the type нумъ. In the case of нѣръ this is not probable (cf. Serbo-Croat. pēc, gen. pēci, loc. pēci). I cite furthermore from the dialects in Kobylje spaskoje and Kotovo: at nači beside at nóci (Broch, Говоры к зап. от Мосальска, p. 74).

In the Čudov NT we find numerous examples of gen. sing. in -ú: плотѣ 157b, смертѣ 142b, яростѣ 155b, немоцѣ 147b, ревностѣ 146b, and even dat. sing. властѣ 121b, плотѣ 120b.

I assume, therefore, that in the gen. sing., too, proto-Slavonic had end-stress, and that the separate languages have retracted the ictus in

parallel. The same process, moreover, has also taken place in Russian in the locative sing., apart from a few instances after the prepositions *в* and *на*.

Considerable light is thus thrown on the stress of the numerals in Russian. As we know, the numerals from 5 to 10 have end-stress in Russian in all the oblique cases. But the accentuation of *девять*, *десять* shows that we are dealing here with old mobile stress. Furthermore, the instrumentals *пятью*, *шестью*, *.. девятью*, *десятью* show stress on the first syllable in the sense of «five times», «six times», etc. (*пятью пять*, etc.). The forms *девять*, *десять*, like *во́лость*, etc., must be the old accusative forms. The form *десять* corresponds to Lithuanian *dėšimtį*, and not to *dešimtis*. This gives us the following declension:

Nom.-acc.	<i>десять</i>	= Lith. <i>dėšimtį</i>
Gen.	<i>десяти</i>	= » <i>dešimtiės</i>
Dat.	<i>*десяти</i>	
Instr.	<i>десятью</i>	Cf. <i>стѣнью</i>
Loc.	<i>десяти</i>	» <i>в стѣнѣ</i>

Dat. *десяти* must have been due to the influence of the gen.-loc. instead of older *\*десяти*<sup>66</sup>

On these premises I have reconstructed the following Balto-Slavonic pattern:

	Sing.	Plural	Dual
Nom.	xi	ixx	ix
Gen.	xi(?)	xxi	
Dat.	ix	xxi(?)	xxi(?)
Acc.	ix	ix	
Instr.	?	xxi	xxi
Loc.	xi	xxi	

*дѣти* от *люди*: Side by side with this pattern, however, Russian also shows traces of another. The words *дѣти* and *люди*, as we know, have end-stress only in the gen. and instr. In modern dialects the forms *дѣтям*, *дѣтях*; *людѣм*, *людѣх* are common (Obnorskij, *Именное склонение*, II p. 393). But the accentuation of these words in the literary language is not Church Slavonic, which would moreover have been unlikely, not least owing to the meaning of the words. The same accentuation occurs in the old (both secular and ecclesiastical) accented texts with the old endings. We find: *люди*, *людѣй*, *людѣм*, *людѣмъ*, *людѣхъ* and *дѣти*, *дѣтѣй*, *дѣтѣмъ*, etc.

The fact that this accentuation is also encountered in Slovincian proves that its occurrence in these words is old and that it goes beyond the bounds of Russian. In Slovincian, *złecā* has the stress on the final syllable in the gen. and instr., and on the root syllable in the other cases (Lorentz, Slovincz. Gr. p. 196): *zēcī*, *zēcī* but *złecim*, *złecax* (Lorentz, Slwz. Wb.

p. 235). We find a similar declension in the case of *lǎžā*, *lǎžī*, *lǎžim*, *lǎžmī*, *lǎžax* (Lorentz, Wb. p. 551).

But in the older Russian texts this accentuation is not limited to the words *дѣти* and *люди*. In Učeniye i Chitrost' we find it in a third *plurale tantum*: *бѣи* 72b, *огми* 2d, *бѣх* 15a, etc.<sup>67</sup> In Domostroj we find: *pѣtex* 32, and furthermore in the old *i*-stem *гость*: *гостемъ* 58, *гостехъ* 64; in Uloženiye: *рѣчамъ* 176a, *въ гостехъ* 334b. Furthermore we find for example in the old *i*-stem *звѣрь*: *звѣремъ* (Tajnaia tain. 17th century, Buslajev 1399), furthermore *рѣтехъ* (Nakazaniye 1645, Busl. 1083), *вѣщемъ* (Ups. Ksl. Fol. 17, 3b), *вѣцехъ* (Smotrickij, 280; Kormčaja 1650, 231a), *цастемъ* (Donat, 529), *сладтемъ* (Triod', 70a), *костехъ*, *ноуцехъ* (Psalt., Vasiljev, Kamora p. 38), *бранемъ* (The Bible 1663, Mark. 13).

Of the examples I have picked out from old texts, and which can be multiplied considerably, it is solely *дѣти*, *люди*, and possibly a few others, that show only root-stress in the dat. and loc. We find *звѣремъ* (Psalt. 1669, 74b), *звѣрехъ* (Triod', 298a), *сладтѣхъ* (Ups. Ksl. Fol. 17, 4a) *владтѣмъ* (Ups. Fol. 17, 11a), *цастѣмъ* (Smotrickij 376), *страстѣмъ* (Smotr. 341), *вещѣхъ* (Korm. 1650, 10a, Domostroj 68, Triod' 95a), *вещѣмъ* (Korm. 1650, 158a).

Some of these words have a Church Slavonic form: *власть*, *вещь*, *сладсть*, *нощь* (Psalt.), *брань*. In some of the texts from which we have quoted examples of root-stress in these words, it is also to be found in the gen. and instr. pl., which must have been a Church Slavonic accentuation. This makes it uncertain whether particularly great importance should be attached to the root-stress in the dat. and loc. in these texts. Thus we find *цастѣи* 280, *цастѣми* 375 besides *цастѣхъ* 328 (Smotr.); *вещма* (The Bible 1663 Luke 4). The question then arises whether we are not in many cases dealing with Church Slavonic forms with the accentual stability so characteristic of pure Church Slavonic forms in Russ.-Church Slavonic. The probability that in some cases we are dealing with pure Church Slavonicisms, makes it difficult to delimit the phenomenon qua Russian accentual phenomenon.

The question is: How has the accentual type *люди*, *-ей*, *людѣм* been delimited, and how are we to explain it?

That it occurs in *pluralia tantum* (*люди*, *дѣти*, *бѣи*) and in words which have joined the *īo*-declension, i.e. in words which have broken away from the broad mass of *i*-stems, might suggest that it is an archaism. On the other hand it is not reasonable to suppose that this type of accentuation was originally the only mobile pattern in the *i*-stems, as the pattern I have reconstructed above is also supported by Old Russian, apart from agreeing well with Lithuanian and with the accentuation we found in the *ā*- and *o*-stems.

In Ukrainian the type with which we are here dealing is far more widespread, here too not least in pluralia tantum: *люди, кури, гуси, діти, сани*, gen. *людéй, курéй, гусéй дітéй*, instr. *курмі, гусьмі, (дітьми), людьмі, саньмі*: dat. *людя́м, ку́рям, гу́сям, дітя́м, са́ням* (*Український правопис* 1946, p. 80). On the other hand we find: *тінь* (fixed stress); *ніт, ноти*, etc., pl. *но́ті, но́тєй, но́та́м, но́та́ми, но́та́х*.

As already mentioned, *lǎžǎ* and *žiecǎ* belong to our group in Slovincian. Furthermore we find *gǎs*, gen. pl. *gǎsŕ*, dat. *gǎsim* instr. *gǎsmŕ* (Lorentz, Slwz. Wb. 264). From *vùoči* (eyes), *vũšǎ* (ears), gen. *vòči, vušŭ* we find the dative forms *vùočout, -ima*, instr. *vùočima, -amŕ*, loc. *vùočax, vũšout, vũšama, -amŕ, vũšax*. Thus in Slovincian, too, pluralia tantum play a prominent role in this group.

We should, however, bear in mind that *oči, uši* are not old plurals of *i*-stems, and that *děti* (F. pl.) is certainly a pluralisation of *děť* (collective F. sing.), so that the question arises whether *děti* is in fact proto-Slavonic. Thus it appears that the number of words attesting a proto-Slavonic basis for this type is rather restricted.

I assume that a few proto-Slavonic words of this type have existed, and that, owing to a more or less isolated position within the system, as pluralia tantum, or as masculine words, they have retained certain peculiarities consisting in a restricted mobility. I believe the basis is old root-stressed words with circumflex root-vowel (Lith. *anglis*, dial. *añglis*, gen. *añglias*)<sup>68</sup>. Why they have been only partially adapted to the mobile pattern, and why end-stress should be found precisely in the gen. and instr., is a question I am unable to answer.

It is probably owing to older end-stress in the gen. sing. that certain masculine words — old *i*-stems — have acquired end-stress throughout the singular in the Russian literary language: cf. *гвоздь, гвоздя́*..., *тервь, тервя́*..., *грудь, грудя́* with root-stress only in nom. (acc.) pl. These words have probably become *o*-stems at an earlier date than *гость, звать* which have root-stress in the singular. The word *конь* can hardly have belonged originally to this group, as Church Slavonic *конь*, Serbo-Croatian *kònj*, Slov. *kònj* are all *jo*-stems. For this reason I have dealt with this word under the *o*-stems.

#### Consonant stems.

Of consonant stems the Slavonic languages have in the main preserved two feminine *r*-stems, as well as *n*-, *s*- and *nt*-stems.

#### 1. *r*-stems.

These are two: Church Slavonic *mati, -ere* and *dašti, -ere*, corresponding to Lithuanian *mótė* gen. *móters* and *duktė* : *duktėrs* (Old Lith. *dukterės*). As in Lithuanian, so in Slavonic, the first-mentioned must be assumed to have been stressed on the first syllable in all numbers and cases, while the second was mobile with alternating ictus between the first and last syllable. Cf. Serbo-Croatian *māti, mātere, māteri, māter, māterōm, māteri, mātere, māterā, māterama* and *kći, kćeri, kćer, kćerju, kćeri, kćeri, kćeri, kćerima*. The forms of the type *kćeri*, etc., must go back to *\*dž(k)ier-*, cf. Russ. *дóщеру*, etc., with *o* representing *ž*. In dialects we still find *māmu* and *dómu*. With regard to the question which this accentuation raises, see Chapter IX.

#### 2. *n*-stems.

The masculine *n*-stems no longer exist in those languages where it is possible to draw any conclusions with regard to accent. We are consequently concerned solely with the neuter.

In modern Russian the stress has become uniform, so that with a few exceptions the words are accented according to the pattern: *имя, имени, именá, имён* ... According to this pattern are declined: *имя, бремя, время, вѣмя, плáмя, сѣмя* (gen. pl. *семѣн*), *плѣмя, стрѣмя*. An exception is *знáмя* : *знамѣна*.

But in older Russian the picture is somewhat more varied.

In Oloženije we find three different types:

1. *имя*: *имямемъ* 37a; pl. *именá* 26a, *имянь* 221b, *имяномъ* 134b, *имяны* 40b.
2. *сѣмя, знáмя*; pl. *сѣмена* 123a, instr. *знáмены* 135a.
3. *племя́*, gen. *племѣни* 73b, instr. *племѣнем*. 177a.

These three types are also encountered elsewhere, e.g. in Domostroj:

1. *имяны* 8 (instr.), 2. *сѣмена* 45, 3. *оу племѣни* 34; in Chronograf:

1. *временá* 7, *имены* 15, 2. *сѣмена* 99, *сѣмень* 129, 3. *племя́* 122.

Cf., belonging to type 2, Uč. i chitr.: *знáмена, сѣмена*; Kormčaja 1650: *тѣмена* 205a, *пѣмена* 104b; and belonging to type 3 Russ. dial.: *на племя́* (Preobraženskij, Et. Dictionary).

We find the same three types in Slovene: 1. *imê*, gen. *imêna*. Nom.-acc. pl. *imêna* must be analogical. 2. *sême*, gen. *sêmena*<sup>69</sup>, nom. pl. *sêmena*, gen. *sêmen*.<sup>70</sup> This declension is regularly developed from a declension with constant root-stress and acute root-vowel. In the nom.-acc. pl. *sêmena* we find, as we constantly do in Slovene, a generalisation of the neo-circumflex on the pattern of the type *dělo, dēla*. The words *sême, slême, vime* are accented in the same way. 3. *plême*, gen. *plémēna* < proto-Slav. *\*plemē \*plemēna*. We have the same accentuation for *brême, strême, vrême*.<sup>71</sup> According to Valjavec (Rad 132 pp. 159, 173) we find nom.-acc. pl.

*bremēna*, *vremēna* with the neo-circumflex regularly encountered in Slovene.

The agreement here between Old Russian and Slovene points back to a proto-Slavonic state which agrees with what we have found in the other nominal stems we have here dealt with. We find a mobile type (e.g. \**jōmē* : \**jōmenā*), and two types of stable accent: one with root-stress \**sēmē* : \**sēmēna*, and one with stress on the suffix *-en-*: \**plemē* gen. sing. \**plemēne*, pl. \**plemēna*.

But the state of affairs is so much more transparent here than in the vocalic stems, because the *-ā-*, *-o-*, *-i-*, *-u-* of the latter so often coalesce with the ending.

In Serbo-Croatian levelling has taken place, just as in Modern Great Russian. We find *plēme*, gen. *plēmēna*, pl. *plemēna*, corresponding to Modern Russian *плѣмя*, *плѣмени* : *племенá*. An exception to this pattern is *vrijēme*: gen. *vrēmēna*, etc., where the nom.-acc. agrees with Slovene *vrēme*, but which otherwise follows the ordinary accentuation. Čakavian, however, has *vrīme*, and Štok. *něvrēme* suggests an older \**vrījeme*<sup>72,73</sup>.

In Ukrainian we find *плѣмя*, gen. *плѣмя*, *плѣмени*, *плѣменем*, *плѣмені* : *племенá*, *племенám* but *ім'я*, gen. *ім'я*, *імені*, *іменем*, *імені* : *іменá*, *-ám*, etc. (Ukr. pravopis, p. 79). According to Smal'-Stocky, Gr: p. 273 f, *ім'я* has in the plural *іменá*, *іменám*, *іменáми*, *іменáх*. This accentuation is peculiar and I am unable to give a satisfactory explanation for it, nor can I give it historical priority over Russian *імя* = Serbo-Croatian *īme*, Slov. *imē*. It seems, however, to provide an echo of the proto-Slavonic type \**-ē*, \**-ēne*, \**-ēna*.

The following observations might be made with regard to the accentuation of the mobile pattern: while the nom. sing. in the mobile *ā*-stems is end-stressed, the nom.-acc. sing. in the mobile neuter *o*-stems is root-stressed. In the neuter *n*-stems, as in the neuter *o*-stems, nom.-acc. sing. has root-stress in the mobile pattern.

We expect end-stress in consonant stems in the gen., instr. and loc. sing. Cf. Lith. *akmuō*, *akmeñs* < *akmenēs*, *ākmeniui*, *ākmeni*, *akmenimi*, *akmenyje* (cf. Sanskrit *pāt*, *pādam*: *paddāh*, Greek *πός*, *πόδα* : *ποδός*). In the Slavonic languages, however, we find root-stress throughout the singular, cf. Russ. *імя*, *імени*, *імени*, *іменем*, *імени*. This is also the accentuation we find in Old Russian and in the Russian Church Slavonic forms with the ending *-e* in the gen. sing. and loc. sing. The genitive ending *-u*, as we saw, has lost its ictus in the mobile *i*-stems as well. But this is possibly not so old (see page 87 f). I believe that the root-stressed nom.-acc. sing. and the constant root-stress in the singular of the neuter root-stressed *o*-stems exerted a certain influence. It would hardly be possible to state the proto-Slavonic accentual paradigm with certainty.

In Russian we find end-stress in all cases of the plural: *именá*, *имѣн*, *именáм*, *именáми*, *именáх*, with which Serbo-Croatian *plemēna* *plemēnā*, *plemēnima* agree. Likewise in Čakavian (Novi) we have *īme*: *imená*, *imén*, *imenih* besides *īmena*, *īmenōn*, *īmeni*, *īmenih*, which is due to a blend of types.

In Russian Church-Slavonic we find for example *временѣх* (Kormčaja, 1650, 3a), *по временѣмъ* (ibid 16a), *писменѣ* (Nakazaniye 1695, Busl. 1086), but also *о временехъ* (Donat 533), *іменехъ* (Smotrickij 116), *іменемъ* (Smotr. 116). I find it difficult to regard the last-mentioned cases as anything but secondary. They belong to a series of sporadic cases of stress on the first syllable, especially in the loc. pl., in Russian, which I have dealt with on pages 76f, 84f, 89f. They possibly have some connection with the constant use of a preposition before the locative, which results in the loc. singular of the mobile *o*-stems and consonant-stems very frequently being unstressed, as the stress falls on the preposition. It is possible that the type *о времени* has produced *о временехъ* by analogy.

### 3. *nt*-stems.

Here, as far as I can see, the mobile type is not to be found in any language, but only the root-stressed and the suffix-stressed type. Thus in Old Russian we find:

1. *оутья* (Uč. i chitr. 33a), *коутья* (Ulož. 331b), pl. *курьта* (Vasmer, Gesprächsbuch, p. 37), *вноучата* (Triod' 297a), *вноучатом* (Ulož. 79b)<sup>74</sup>.
2. *ослѧ* (Uč. i chitr. 71a), *овчѧ* (Chron. 41), *дутья* (Ulož. 326a).

Agreement with this is shown by Slovene:

1. *jāgnje*<sup>75</sup>, gen. *jāgnjeta*, pl. *jāgnjeta*, *jāgnjet*. This paradigm goes back to proto-Slav. \**jāgne*, \**jāgneṭa*, with the regular Slovene circumflex in the plural of barytonised neuters.

2. *tēle*, gen. *telēta*, pl. *telēta*, *telēt*<sup>76</sup>, regularly from proto-Slav. \**telē*, \**telēta*, with the already-mentioned circumflexion in the plural.

In some cases we find vacillation: Valjavec, l.c. 198. quotes *prasē*, gen. *prasēta*, *žrebē*, *-ēta*, *svinē*, *-ēta* «ali se danes običnije govori: *prasē*, *prasēta*; *žrebē*, *žrebēta* i t.d.» (thus in Pleteršnik)<sup>77</sup>. The forms *prasē*, *žrebē* agree with Serbo-Croatian. Here we find:

1. *jāgnje*, gen. *jāgnjeta*; *ždrīebe*: *ždrēbeta*; *prāse* : *prāseta*.
2. *tēle*, *tēleta*; *dijēte*, *djēteta*; *jūne*, *jūneta*; *zvjēre*, *zvjēreta*.

The forms *prāse*, *prāseta* and *ždrīebe*, *ždrēbeta* violate the Slavonic principle that stressed circumflex root-syllable in one form is accompanied by end-stress in some other form of the same word, i.e. that words which show instances of circumflex-stressed first syllable are always mobile. We must remember, however, that the Serbo-Croatian paradigm is defective, the

plural having been replaced by a collective formation with the suffix *-ād*. But this is not the case in Slovene. Cf. also Čak. (Novi) *prāse*; pl. *prāseta*, *prāsēt*. The type *prāse*, *prāseta* must be assumed to have belonged to an originally mobile paradigm: \**poře* : pl. \**pořetā*, which would constitute the missing third element in the schema for the accentuation of these words<sup>78</sup>.

In Modern Russian the type in *-āma* has been generalised in the plural, while the singular, as we know, has been replaced by a formation in *-ēnok*.

In Slovencian, too, we find levelling of the two types *cielq*, *cielācā* ..., pl. *celāta*, *cielqt*, *-ātou* and *jāghq*, *jāghica*, pl. *jāghāta*, *jāghqt*, *-ātou*. This paradigm may agree entirely with Slovene *telēta*, Russ. *телѣта*, *темѣт*, etc., apart from the nom.-acc. *celāta* which I consider to have analogical stress from the type *remjūōna* besides *remjūonoum*, etc., as I cannot support Lehr-Splawiński's theory of a proto-Slavonic neo-circumflex which preserves ictus. The gen. pl. *cielqt*, with short-stage vocalism on the last syllable, besides *χλιούου*, *mješčoun*, *kazoun*, *vjesoul*, *remjoun*, is peculiar. This short-stage vocalism results, according to the sound-laws, in retraction to the first syllable: *cielqt*, *jāghqt*.

#### 4. *s*-stems.

These have fallen into disuse in most Slavonic languages. In Russian *нѣбо* : *небеса́*, *небѣс* and *чѹдо* : *чудеса́*, *чудѣс* are Church Slavonic forms, as is shown by the pronunciation *-ec* (not *-ěc*) in the gen. pl. In Serbo-Croatian we find *čūdo*, pl. *čudesa*, *něbo* : *nebesa*, *tjelo* : *tjelēsa*, *kōlo* : *kolēsa*, which shows that these stems are mobile. Likewise, in Čak. (Novi) we find *něbo* : *nebesá*, *nebes*, *nebesih* (besides *nebesih* and *nebesih*); *tělo* : *telesá* (Belić, Izv. 14, p. 222).

In Slovene the ictus of the root-stressed forms has been generalised e.g. in *okō*, gen. sg., nom.-acc. pl. *očēsa* (Pleteršnik). But we also find *uhō*, gen. sing. *ušēsa*, pl. *ušēsa* (Valjavec, Rad. 132 p. 198). Pleteršnik, gives gen. sing. *ušēsa*. We are here clearly dealing with a nom.-acc. \**ūho*, but in the other forms the stress is on *-es-*. I cannot explain this accentuation<sup>79</sup>. Did proto-Slavonic possess a type of *s*-stem, with the stress on the suffix *-es-*, which in Slovene *uhō* has blended with the mobile type? Russ. Ch. Sl. *rydēca* (nom. pl.), cf. the Čudov NT, 23b, indicates that even the third type — with root-stress — existed in proto-Slavonic.

In Russian-Church Slavonic we find a peculiar accentuation of these stems: *нѣбо*, gen. *небесѣ (-cū)*, dat. *небесѹ*, instr. *небесѣмъ*, loc. *небесѣ*, pl. *небеса́*, *небѣсѣ*, etc., i.e. with end-stress in all forms in *-es-*. Examples are not difficult to find, in fact they abound in Russian-Church Slavonic texts, where such words as *нѣбо*, *слово*, *тѣло*, etc., occur with great frequency. No traces of this accentuation in the singular are to be found in Slovene, where *črevō*, *črevēsa*; *drevō*, *drevēsa*; *slovō*, *slovēsa*, etc., point to the same accentuation in the nominative as in the other cases.

However, on the basis of my general views on Russian-Church Slavonic accentuation, I am inclined to believe that *нѣбо* and *небесѣ*, *-ū*, *-ēma*, *-ū* belong to two different languages. Nom.-acc. *нѣбо* (*нѣбо*), *тѣло*, *слово* also existed in Russian, and have therefore retained their Russian accentuation, but in Russian they had passed into the *o*-declension: *нѣбо*, gen. *нѣба* («palate»), etc. The accentuation *небесѣ* *-ū*, etc., is in my opinion Church Slavonic. It may be due to the influence of plural forms in *-ecā*, etc. Cf. *съ нѣсѣ послā* in the patriarch Jevfimij (Syrku's edition, p. 95 Zopiski ist.-fil. fak. S. Pb., č. 25).

#### Genitive plural.

This form demands a number of special observations, on account of the peculiarities it shows in several respects, both with regard to accent and quantity. If we now take a look at these peculiarities, we shall probably find that the best way of doing so is to divide the material according to the following schema: (a) the barytonised type, (b) the end-stressed type, the latter comprising the mobile stems and the columnally end-stressed *ā*- and *o*-stems.

##### a. The barytonised type.

As already stated in the general section of this book (page 24f), words with acute long vowel in the stressed syllable have changed this acute into circumflex in proto-Slavonic, provided the acute syllable immediately preceded the ending: Slov. *krāva* : *krāv*, *dělo* : *děl*; Čak. *čās* : *čas*, *krāva* : *krāv*, *dělo* : *děl*; Czech. *krāva* : *krav*, *dílo* : *děl*.

In Štok. and to a certain extent Čak.<sup>80</sup> the ictus is retracted from the vowel with secondary circumflex to a short vowel in the preceding syllable; this vowel appears to have been a rising one, as its ictus is not retracted to a preposition: *lōpātā*, *kōljēnā*. As mentioned on page 24f, it is in my opinion possible to regard this retraction as proto-Slavonic. There also seem to be traces of this phenomenon in Bulgarian.

In proto-Slavonic a short vowel in a medial syllable could carry the ictus, as this vowel was rising. In Štokavian the ictus is, however, retracted even from short vowels in the gen. pl., if the preceding syllable is short: *prōzor*, *prōzori* : *prōzōrā*; *ūroci* : *ūrōkā*. This retraction takes place also from the «intercalated» *-ov-*, where this is stressed: *kōtao*, *kōtla*; *kōtlovi* : *kōtlōvā*; *vō*, *vōla*, *vōlovi* : *vōlōvā*; (but *brōd*, *brōda*, *brōdovi* : *brodōvā*). This retraction was probably simultaneous with the first-mentioned case (*lōpātā*, etc.). For if the circumflex arose phonetically where the syllable in question was long rising (acute), it is probable that the same effect was produced where the vowel was short rising, as the short vowel can hardly be assumed to have been less amenable to metatony than the long. This

produced a short falling vowel, which then passed its ictus to the preceding syllable in the same way as inner circumflex.

The reason for circumflexion must be sought in the ending. I believe that van Wijk (Izv. XX, 3, p. 32 ff, Akzentsysteme, p. 97) and H. Pedersen (K.Z. 38, p. 302) are right in believing that the reason is to be found in the reduction of an older *\*-ōm* to *-o*. Meillet, MSL 22, p. 258, it is true, maintains that the Slavonic ending *-o* must be derived from Indo-European *\*-om*. Meillet assumed this short ending not only in Slavonic, but also in (1) Old Irish *fer n-*, (2) Old Prussian *grikan*, *swintan*, (3) Umbrian *fratrom*, etc. As far as the Prussian forms are concerned, I believe that we are here dealing with *\*-ōm*, owing to the forms *griquan* (II), *grecon*, *grekun* (I), cf. NTS IV, p. 147. Old Ir. *fer* hardly proves that the vowel of the ending was short. Cf. the first person subjunctive (conjunct form) *ber* < *\*berām*, which Meillet also mentions. In Umbrian, *-u(m)* in the Latin alphabet never represents an original *\*-ōm*. As Umbrian once has the form *-arum* (*pracatarum*), written in the Latin alphabet, the ending probably goes back to *\*-ōm*; (cf. Buck, Grammar p. 50). For this reason I consider that the basis for assuming the ending *\*-om* in the genitive plural is very uncertain.

In Čakavian (Novi) we find in the pronoun the gen. loc. pl. *nās*, *vās*, *nih*, *sih*, besides Štok. *nās*, *vās*, *njih*. I take it that *nās*, *vās* originally belonged to the locative (*\*nōsu*, *\*vōsu*), while *nās*, *vās* are a continuation of the genitive. In the Kajkavian dialect in Prigorje we find, according to Rožić, gen.-acc. *nās*, *vās*, loc. *nās*, *vās* (rarely *vās*). I assume that this state of affairs agrees with the sound-laws and continues proto-Slavonic gen. *\*nāsz*, *vāsz* loc. *\*nāsz*, *\*vāsz*.

#### b. The end-stressed type.

In mobile words and in *ā*- and *o*-stems of type b, the ictus in the gen. pl. was originally on the ending *-o*, whence it was retracted to the preceding syllable, the vowel of which acquired neo-acute. Cf. Čak. (Novi): *žén*, *gór*, *lih*, *brád*, *kríl*, *nebés*, *imén*; Slov. *kónj*, *duhóv*, *móž*, *gór*, Russ. *волóc*.

In Serbo-Croat. and Slovene, in end-stressed and mobile *ā*- and *o*-stems where the penultimate syllable contains a *o*, *o*, we find in some instances in the gen. pl. a retraction of the ictus to the syllable preceding the *o*, *o*, i.e. a skipping of a semi-vowel.

In Čak. (Novi) we find in the *o*-stems for instance from *svetāc* < *\*svěťcě* (gen. *svěťcě*) in the plural: nom. *svěťca* and *svěťci*, gen. *svěťac*, instr. *svěťci* and *svěťci*, loc. *svěťcih* and *svěťcih*. Furthermore: *kosāc*, gen. *kosāc* — gen. pl. *kōsāc* (and *kosāc*, *kōscīh*); *otāc*, *ocā* — gen. pl. *ōtāc* and *otāc*; *studenāc*, *studēncā* — gen. pl. *studēnāc*.

In literary Serbo-Croatian we seldom find this stress: *kōsac*, *kōsca*, pl. *kōsci* : *kosācā*; *drao*, *ōrli* : *orālā*; *sēstra* : *sestārā*. We find, however, *blizānak*, *blizānka*, *blizānci* : *blizānākā*; *vrābac* : *vrābācā*; *pismo* : *pīsāmā*; *otac*, *oca*, *oci* : *ōtāca* beside *otācā*; *pōsao*, *pōsla* : *pōsālā* beside *pasālā*.

In the *ā*-stems, in the literary language, we do not find this retraction: we find *ōvca*, gen. pl. *ovācā*; *glāvnja* : *glavānjā*; cf. Čak. *ovāc*, *igāl*. But we find examples in dialects, Štok. *ōvācā*.

From Slovene Ramovš quotes (Južnosl. fil. II, p. 234) gen. pl. *ōvēc* < *\*ōvēc*. Nevertheless, forms such as *čebār* < *\*čebār*, *ovāc*, *dasāk* (with circumflex on the pattern of *rib*, etc.) are commoner. Ramovš further quotes gen. pl. *\*lōnec* > *lōnec* (cf. Štok. *lōnac*, *lōnca*, pl. *lōnci*, *lōnācā*). He states: «verjetneje je da je *lōnec* analogija po loc. pl. *lōncich*» (prim. čak. *krđvih*, *bréstih*) > *lōncih*, *dolenjsko lūncax*, po čemer je tudi instr. *z-lūncā*.» Is it not possible that here not only the *o* (for *o*) with which Ramovš is dealing, but also the accent, is due to the influence of the locative plural (possibly, too, the instrumental plural)?

Considering that *\*ōtēcix* gave *\*ōtēcix* > *ōtēc* (probably through an intermediate *\*ōtēcix*), a gen. *\*ōtēc* > *ōtēc* might have been formed analogically. I believe that these forms are secondary. Another argument in favour of this is that in the gen. pl. of the *ā*-declension we find fewer examples of this retraction than in the *o*-declension: for here we have no retraction in the locative plural. That we nevertheless find certain instances, such as Štok. dial. *ōvācā*, Slov. *ōvēc*, is due, I consider, to the influence of the *o*-stems: at a time when the phonetically regular forms in *\*ōtēc* were here used side by side with the analogical forms in *-ēc*, it would be possible to form *\*ōvēc* besides *\*ovēc*.

In Russian we find a corresponding vacillation in a case such as *окон*, dial. *яеу* beside dial. *окон*, *яеу* (in the literary language *яиу*). The two last-mentioned must be regarded as phonetically regular, while the forms *окон*, *яеу* are analogical, and formed on the pattern of the other plural cases. From Kostromskoj uj. N. Vinogradov quotes: *окон* beside *окон*, *дровеу* beside *дровеу*, *брёвен* beside *бревён*, *еиу* beside *еиу*, Sborn. 77, 8, p. 78 f.

#### c. The question of compensatory lengthening.

In Serbo-Croatian the vowel of the syllable which in proto-Slavonic immediately preceded *-o(-o)* is always long: *ūdārā*, *gradōvā*, *grādīcā*, *sēlā*, *póljā*, *pleménā*, *žēnā*, *mātērā*, *sūnācā*, etc. In the same way we have in Čak. *čās*, *rāl*, *kríl*, *sěl-sěl*, *telēt*, *krāv*, *nebés*.

The length is phonetically regular in cases where we have circumflex or neo-acute long vowel: *čās*, *rāl*, *telēt* — *kríl*. In old short vowels, on the other hand, the length is striking. To a large extent these had neo-acute,



but neo-acute short vowel was otherwise not lengthened in Štok. and Čak. except in special instances: in front of -v, -j and in front of the suffix -lje. We find *bòb*, *pòp*, etc. How then are we to account for *stópā* (< \**stōp -ā*), Čak. *konōp* ...?

We find a similar lengthening in Slovene: *kōnj*, *grobov*, *mōž*, *lēt*, *pōlj*, *līp*, *gór*, *gúb*, *nóg*, *vóz*, *otrók* (see Breznik, Slovnica; Valjavec, Rad 132, p. 172). Here, too, forms with circumflexion of a long vowel or neo-acute long vowel should have length: *lēt*, *līp*, *gúb*, *mōž*, but neo-acute short vowel in final syllable does not otherwise occur as long (nom. sing. *bòb*, *kōnj*, *pòp*, etc.).

The question which here arises is whether the ending of the gen. pl. (Indo-European \*-ōm/n), as soon as it was shortened to \*-on (> -ə), produced compensatory lengthening, and whether this might be the explanation for the *ā* (< ə, ɐ), *ō*, *ē*, which we find in Serbo-Croatian and Slovene in the syllable immediately preceding the -ə.

A priori there are reasons for rejecting this solution. We can find no other certain instances of long *e*, *o* in proto-Slavonic.

Furthermore, I do not believe that conditions in Serbo-Croatian and Slovene make it necessary to resort to this solution: in Serbo-Croatian regular forms such as *čas*: *čas*, *rało*: *rāl*, as well as the regular length in front of -v in the frequently occurring -ōv, may have resulted in length being regarded as a sign of the gen. pl.

In Slovene a similar line of argument may be applied: here we also find old acute shortened in the final syllable (*rāk*), and it was probably at an earlier stage short in all stressed syllables, so that contrasts such as *rāk*: *rāk*, \**lipa*: *līp* may have existed in this language as well.

In Czech, as we know, circumflex produces shortening, so that here we get the opposite pattern: *kráva*: *krav*, *víra*: *věr*, *síla*: *síl* ... In words with proto-Slavonic short root-vowel — which is what interests us here — we find in most modern dialects a short vowel in the genitive plural: *žen*, *včel*, *hor*, *kop*, *koz*, *noz*, *hoh*, *stop*, but in the older language we often find long vowel: *slóv*, *hór*, *vód*, *škól*, *zém*. In modern Slovak, lengthening has been carried through: *žien*, *včiel*, *hór*, *vód*, *kóp*, *stóp*, *prosieb* ... (Trávníček, Mluvnice, p. 270). Without being able to go into the question of the conditions for lengthening of a short vowel in front of -ə, -ɐ in Czechoslovak (see Trávníček, op. cit., p. 267 ff, RESl. I, p. 204 ff), I consider it sufficient to remind the reader that in certain cases we find lengthening in front of -ə, -ɐ, outside the gen. pl. too: cf. nom. sing. *búh*, *dúb*, *hnúj*, *vúz*, *múj* ..., Slovak *kôš*, *bób*, *ból*, etc. In certain circumstances, which I shall not attempt to define at this juncture, it will thus be legitimate to assume a phonetical lengthening in gen. pl. in -ə, -ɐ. In the course of time length may have spread from instances of this kind, as well as from cases

where the vowel represented a neo-acute long vowel, cf. Cz. dialect *strán*, *hláv*, *čas*. In proto-Czecho-Slovak we shall have to assume a declension \**strāna*, *strāny*, \**straně*, \**stranu*, \**stranū*, \**strāně*, \**strany*, \**strān*, \**strānām*, \**strānami*, \**strānāch*; \**vlas*, \**vlasa*, \**vlasu*, \**vlasom*, \**vlasě*, \**vlasī*, \**vlās*, \**vlasōm*, \**vlasiech*. Patterns of this kind may have caused the long vowel in the genitive plural to have spread beyond its original boundaries. A similar spread of the long vowel has clearly taken place in Central Slovak, where long vowel has been generalised in the gen. pl., and also occurs in instances where it is clearly secondary: *ryb*, *síl*, *malín*, *besied*, *lopát*, *kopýt*, *jablék*, *jahniat* (cf. Trávníček, op. cit.).

In Polish we find numerous instances of long vowel (or a pochylenie which has been developed from it) for an originally short vowel in the gen. pl.: *męsów*, *pól*, *slów*, *nóg*, *wód*, *robót*, *stóp*. In Old Polish we find e.g. *cznooth*, *lyaath*, *wrooth*, *ottychmyaasth* (see Łos, Gram. polska I, p. 111). Cf. also dial., *strāt*, *lāp*, *lāt*, *dotychčas* (Nitsch, Roczn. sław. I, 133). In the nom. sing. of the masculine *o*-stems, we find lengthening of a short vowel, and — in old barytona — conservation of length only in front of a voiced consonant: *róg*, *sól*, but *nos*; *dąb*, *wąz* but *kęs*, *geś*. In the gen. pl. this limitation does not exist; cf. *stóp*, *robót*, *raq*, *swiąt*. I consider it perfectly legitimate to assume that the long vowel in Polish, too, was applied secondarily as a sign of the gen. pl., on the basis of certain types of examples where the length was phonetic.

The length was clearly phonetic in words with -ə, -ɐ after voiced consonants, such as *wód* (from *woda*, *wody*), etc., and probably also in words with a neo-acute long vowel.<sup>81</sup> Thus I consider that *raq* from *reka*, *swiąt* from *święto* are phonetically regular, cf. nom. sing. *kąt* (gen. *kąta*) Russ. *kym* (-á), Serbo-Croatian *kūt* (gen. *kúta*).

Polish *cieląt* besides Slovincian *cielāt* (short-stage vocalism) confirms that length in Polish really did spread in the genitive plural. (Pochylenie, however, has never been completely carried through: cf. *blot*, Serbo-Croatian nom. sg. *blāto*; *pet*, Serbo-Croatian nom. sg. *pūto*. These are words with secondary circumflex in the gen. pl. in proto-Slavonic.)

The long-stage vocalism has certainly spread beyond the boundaries dictated by the sound-laws in Slovincian gen. pl. *sousā<sup>u</sup>d*, *rīb* ..., where we have proto-Slavonic circumflex, while *broud* besides *brūoda* is phonetically regular.

In these circumstances I find no conclusive evidence to suggest that there has been any proto-Slavonic compensatory lengthening in the genitive plural, this despite the fact that length is easier to explain in West Slavonic than in Serbo-Croatian and Slovene, where differences of ictus and intonation have been preserved. Cf. p. 118.

## V. THE ADJECTIVE.

The Slavonic simple adjective<sup>82</sup> is an ordinary noun with a stem in -o- for the MN, and in -ā- for the F, and has the accentual characteristics of the noun. We find stem-stressed, columnally end-stressed and mobile words. The three methods of accentuation have been grouped in such a way that the same accentual type occurs in all genders within the same adjective.

Thus we find:

- a) Russ. *pad*, *páda*, *pádo*, *pády*; *нал*, *на́ла*, *на́ло*, *на́ли*, Slov. *stâr*, *stára*, *stáro*; Čak. (Novi) *čist*, *čista*, *čisto*; *stâr*, *stâra*, *stâro*.  
 b) Russ. *бел*, *белá*, *белó*, *белы́*; *нѣс*, *нѣслá*, *нѣсли́*. Čak. *bél*, *bělā*, *běld*; *gól*, *golā*, *gold*. Russ. *глубо́к*, *глубока́*, *глубоко́*. Čak. *visòk*, *visokā*, *visokò*.  
 c) Russ. *сух*, *сухá*, *су́хо*, *су́хи*; *был*, *былá*, *бы́ло*, *бы́ли*; *вѣсел*, *веселá*, *вѣсело*, *вѣсели́*.  
 Čak. *nòv*, *novā*, *nòvo*; *blāg*, *blāgā*, *blāgo*; *òkrūgāl*, *okrūglā*, *òkrūglo*. Slov. *mlād*, *mlāda*, *mladò*; pl. *mladī*, *mladē*, *mladā*, dual *mladā*, *mladē*, *mlādi*.

In group (c) each of the three genders has a mobile declension. Cf. for example the declension in Dubrovnik, which has retained the old accentuation: M. *sūh*, gen. *sūha* .., nom. pl. *sūhi*, F. *sūha*, gen. *sūhē*, acc. *sūhu*, nom.-acc. pl. *sūhe*; N. *sūho*, gen. *sūha* .., nom.-acc. pl. *sūha*, Cf. Slov. acc. sing. M. *mlād*, F. *mladò*, N. *mladò*. (Leskien, Gr. p. 382 f.)

Similarly in Russian-Church Slavonic we find *новá* *вся творю́*; *зѣмлю́* *нову́* (Apoc. 21, the Bible 1663).

The compound (definite) adjective presents a number of complications as far as accent is concerned. A. Belić, in his standard work *Akcenatske studije*, has taken his point de départ precisely in this formation, with the object of establishing proto-Slavonic metatony. However, as this formation is based on a composition of two elements which in post-proto-Slavonic times have merged more and more together to form a unity, the possibility must be taken into account that the present accentuation of these forms is in many cases of fairly recent date. It is therefore my belief that they do not offer any safe basis for an explanation of proto-Slavonic metatony and shift of ictus. Belić in fact gives no real explanation of the phenomenon of metatony, merely describing it and defining it as something which takes place together with a change in the shape of the word.

I propose to consider the accentuation of the compound adjective in the following way:

- a) The «long form» of the stem-stressed type has circumflex in Slovene, and — to a varying extent — in North Čakavian and Štokavian dialects.

Thus in Slovene we find: *stâr*, *stáro*, *stára*, definite form: *stârī*, furthermore *čisti*, *slābi*, *sivi*, *zdrāvi*, *prāvi*, *māli*, *bogāti* ... Similarly in Kastavian (Čak.) we find *dūgī*, *mīlī*, *sītī*, *slābi*, *zdrāvi*, *tīhī*, *zrēlī*, *māli*, *prāvī*, *stārī*. (Belić, Akc. Stud., p. 19 f). But in other Čak. dialects the type is more limited. Thus in Novi we find *čisti*, *dūgī*, *pūnī*, *sītī*, *slābī*, *zdrāvī*, *bogātī*. We find circumflexion in *stārī*, *prāvī*, *mālī*. In the Štokavian literary language we find *sītī*, *pūnī*, etc., but *mālī*, *prāvī* besides *prāvī*, *stārī*, *rānī*. In Slovene neo-circumflex would be regular in front of a long vowel, and the endings of the definite forms originally had long vowel due to contraction. As the two elements of the definite adjective in post-proto-Slavonic times have developed in the direction of an increasingly greater unity, it is probable that it was during this development that the Serbo-Croatian dialects, too, acquired metatony. In Czech (*stâr*): *starý*, (*zdrāv*): *zdravý*, *pravý*, *raný*, *čistý*, *milý* there is no need to take into account proto-Slavonic circumflex, as acute, too, is shortened in the first syllable of words of more than two syllables (such as *starýj* ..). In Russian, only the old ictus can still be established: *сытый*, *правый*, *старый*, *малый*, *богатый*, *здоровый*, *чистый*, *милый*.

b) The long form of the columnally end-stressed adjectives has, as far as can be ascertained, ictus on the syllable immediately preceding the ending, and neo-acute. Corresponding to *\*bēlā*, *\*bēlā*, *\*bēlō* .. we have Čak. (Novi) *bělī*, *bělōga*; Štok. *bijeli*; Slov. *bēli*; Czech. *bílý*; cf. Russ. *бѣлый*.

Corresponding to *\*gòlā*, *\*golā*, *\*golō* .. we have Russ. dial. *голый*, Slov. *gólī*<sup>83</sup>, cf. Slovencian *gùlī*<sup>84</sup>. Cf. furthermore Russian dial. (Tot'ma) *vòstroj*, (cf. *оцѣп*, *оцпó*), *dòbroj* (*добр*, *-á*, *-ó*), *xoròšova* (*хорош*, *-á*, *-ó*), *gòloj*, (*гол*, *-á*, *-ó*). Corresponding to *\*vysòkā*, *\*vysokā*, *\*vysokò* we have Russian *высокий*, cf. Čak. *širòkī* and *širòkī* (by analogy with the type *stārī*, *mālī*, etc.), *dumbòkī* (*dumbòkī*).

I believe the reason for this accentuation can be traced in the following circumstances:

1. A contraction took place in the oblique cases in the separate languages: *\*belajego*, *\*belujemu*, *\*belyjmi*, etc., must in the various Slavonic languages be assumed to have passed through a stage *\*bēlāgo*, *\*bēlūmu*, *\*bēlymi*, etc., with falling contractional vowel, because the original ictus was on the first contractional syllable. From this circumflex long vowel in an internal syllable the ictus was in the separate languages transferred to the previous syllable, which acquired a neo-acute.<sup>85</sup>

2. In the nom. and acc. sing., dual, plural, no contraction took place in Russian. And yet we find *бѣлый*, *добрый*, etc., an accentuation which in itself may be due to the oblique cases. But as *\*lēlāj* has not been retained in any language, it must be assumed that the retraction is very

old. It must be proto-Slavonic, as it is clearly older than the advancing of ictus — likewise proto-Slavonic — which we find in type c. The transition *\*bělajъ* > *\*bělъjъ* would undoubtedly mark a special development, as, to the best of my knowledge, there are no other examples of retraction from semi-vowel in a strong position. But in the composite forms with which we are here dealing it is quite possible that the first element had a comparatively independent position, and that therefore the same sound law may have operated in *\*bělajъ* as in *\*bělъ*. I call the reader's attention to a similar development in the Bulgarian definite forms in *-тъ*: *краль*, pl. *кралѣ*, definite form *кралѣят* (cf. Russ. *король*, *короля*), *цар* pl. *царѣ*: *царѣят* (cf. Russ. *царь*, *-я*); *нон* pl. *нонове*: *нонѣт* (Russ. *нон*, *-а*). The other nominatives, *\*bělaja*, etc., could be analogical with the Masculine.

c. To the mobile adjectives correspond in the separate languages both forms with the stress on the ending and root-stressed forms with a neo-acute in the root.

In Čakavian (Novi) monosyllabic stems with a short root-vowel have end-stress, words with a long root-vowel and polysyllabic words have root-stress (with neo-acute):

1. *břz*, *brzā*, *břzo*: *brzī*, *nǫv*, *novā*: *novī*.
2. *blāg*, *blāgā*, *blāgo*: *blāgī*, further: *blēdī*, *drāgī*, *gústī*, *hūdī*, *sēdī*, etc. *dūžān*, *dūžnā*, *dūžno*: *dūžnī*, *glādī*, *krátkī*, etc. *ōkrūgal*, *ōkrūglā*, *ōkrūglo*: *ōkrūglī*, etc.

In Russian, we have the same types, but distributed in quite a different way:

1. *дорозой*, *густой*, *худой*, *сухой* ..
2. *бóрзый*, *новѣй* (dial. *новѣй*), *твѣрдый*, *должны́й*, *весѣлѣй* ..

Štokavian, too, shows a different distribution from Čak. (Novi):

1. *gustī*, *svēti*, *krivī* .. 2. *nǫvī*, *mlādī*, *gustī* ..

In Slovencian we find the same two types:

1. *mlēdī*, *zlotī*, *sāx'ī*, *gastī*, *prostī* ..
2. *skōupī*, *mōudrī*, *būsī* ..

In Czech we most frequently find a short root-vowel, i.e. forms corresponding to type 1. More rarely we find forms with a long root-vowel (originally neo-acute), that is to say forms corresponding to type 2.

1. *blahý*, *bledý*, *častý*, *suchý* ..
2. *hloupý*, *moudrý*, *přímý*, *skoupý* ..

The difference in the distribution of these types suggests that the decisive phases in this development belong to post-*proto-Slavonic* times.

What apparently occurred in the first instance was an advance of the ictus in the forms accenting the first syllable owing to the addition of an enclitic. This phenomenon is also to be found in other instances in the Slavonic languages. We have, for instance, Russian *родилсѧ*,

*родилсѧ* besides *proto-Slavonic* *\*rōdīlъ*, *\*rodīlā*, *rōdīlo*, *\*rōdīli* (p. 143), *клялсѧ*, etc., *Нѡвѡгородъ*: *Нѡвѡгорода*, etc.

The stress has moved from the first syllable to the enclitic syllable or to the last syllable of the basic word, while a stressed medial syllable has retained the ictus. Dolobko has dealt in a very interesting way with these projections of stress in Slavia V, p. 678 f., where he deals with such examples as:

Russ. <i>ночь</i> : <i>ночѣсь</i>	Bulg. <i>нощѣсь</i>	Serbo-Croat. <i>nôčas</i>
» <i>осень</i> : <i>осенѣсь</i>	» <i>есенѣсь</i>	» <i>jesenas</i>
» <i>зима</i> : <i>зимѣсь</i>	» <i>зимѣсь</i>	» <i>zimus</i>
» <i>ветер</i> : <i>ветѡрьсь</i>		

but Russ. <i>лѣто</i> : <i>лѣтось</i>	» <i>лѣтось</i>	Serbo-Croat. <i>ljētōs</i>	Slov. <i>lētōs</i>
» <i>ѣтро</i> : <i>ѣтрось</i>		» <i>jūtrōs</i>	» <i>jūtrōs</i>

Cf. also Čudov NT *мирѡсь* 46b, *родѡсь* 13a.

These examples, in which *-сь* stands in an enclitic position, show advancing of the ictus from a short and circumflex — but not from an acute—vowel. It is impossible to decide whether *ночѣсь*, etc., is a continuation of *\*ноѣсь* (*\*ноѣсь*) or *\*ноѣсь*.

In the same way in New Bulgarian the accent is pushed forward in mobile substantives with circumflex or short root vowel: *брѣгѣтъ*, *богѣтъ*, *дарѣтъ*, *гласѣтъ*, etc., but *брѣтътъ*, *грѣтътъ*; *мѣсто*, *брѣго вѣтъ*, *рѣкѣтъ*, *младостѣтъ*. Furthermore *мѣкъ* *ми*, *сынъ* *ми* but *брѣтъ* *ми*, *зѣтъ* *ми*. Bulachovskij (Južnosl. fil. II, p. 286) is probably right in stating the rule as follows: ictus was advanced to the last syllable of the basic word when an enclitic was added; if this syllable contained a weak semi-vowel, the stress fell on the following full vowel.

In all these instances I believe we are dealing with tendencies which as such may go back to *proto-Slavonic* times, even though many of the examples I have mentioned — if not all of them — belong to later periods. I shall not try to formulate any rule as to how advancing of stress took place in *proto-Slavonic*, as it need not necessarily have agreed with the development of the definite form in New Bulgarian. But I believe that — as far as the first column is concerned, maybe as early as *proto-Slavonic* times — the following development took place.

Sg. M.	<i>*sūxъ</i> : <i>*suxъjъ</i>	>	<i>*suxъjъ</i>	=	<i>*suxъjъ</i>
	<i>*sūxa</i> : <i>*suxajego</i>	>	<i>*suxāgo</i>	>	<i>*suxago</i>
	<i>*sūxu</i> : <i>*suxujemu</i>	>	<i>*suxūtu</i>	>	<i>*suxumtu</i>
F.	<i>*suxā</i> : <i>*suxaja</i>	>	<i>*suxāja</i>	=	<i>*suxāja</i>
N.	<i>*sūxo</i> : <i>*suxoje</i>	>	<i>*suxōje</i>	=	<i>*suxōje</i>
Pl. N.	<i>*suxā</i> : <i>*suxaja</i>	>	<i>*suxāja</i>	=	<i>*suxāja</i>
	<i>*suxъ</i> : <i>*suxъjixъ</i>	>	<i>*suxъxъ</i>	>	<i>*suxъxъ</i>
	<i>*suxъ</i> : <i>*suxъjimi</i>	>	<i>*suxъmi</i>	>	<i>*suxъmi</i>

Thus from the paradigm which developed in the separate languages: \**suxàjb*, \**súxago*, \**novàjb* : *nòvago*, two types have been derived: \**suxàjb*, \**suxágo*; \**novàjb* : \**novágo*<sup>86</sup> and \**súxàjb*, \**súxago*, \**nòvàjb*, \**nòvago*, distributed in various ways in the different languages.

In the same way in polysyllabic words: Čak. *okruglǝ*, Russ. *весёлый* belong to the accentual type \**súxàjb*, whose ictus and intonation are borrowed from the oblique cases.

Note. The short root-vowel in the end-stressed type: Štok. *gústǝ*, Czech *suchý*, Pol. *mlody*, Slovincian *mlodǝ* probably originates from the position in front of the long vowel (the type \**mālǝna* > Czech, Serbo-Croatian *malina*), cf. Trávníček, Mluvnice, p. 265.

The vacillation which is to be found within the separate languages also suggests that the two accentual types, Russ. *cyxóǝ* — Čak. *súhǝ*, arose from one and the same paradigm with alternating stress in the declension. Broch (Говоры к зап. от Мосальска p. 74) quotes from the Mosal'sk district (dial. Kobylje-Spasskoje and Kotovo): *yaladnóǝ* and *yalódnǝǝ*, *žaltóǝ* and *žóltǝǝ*, *talstóǝ* and *tólstǝǝ*, *t'asnóǝ* and *t'ésnǝǝ*, *čisnóǝ* and *čésnǝǝ*, *melkóǝ* and *mélkǝǝ*, *staršóǝ* and *stáršǝǝ*, *xitróǝ* and *xitrǝǝ*, *pervóǝ* and *pérǝǝ*, *tritǝǝ* and *trétǝǝ*.

#### Comparatives.

In the neuter form of the comparative, where *-ǝ* is added direct to the root, we find proto-Slavonic metatony. Thus in Russian we find: *мóлод* : *мóложе*, *дóрог* : *дóроже*. This agrees with Old Czech *chúze*, *lépe*, *kráce*, *húšce*, *hóře*, *měně*, *šlě* . . while the masculine has the short vowel *chuzǝ*, *krací*, etc. Modern Czech has *výše*, *hůře*, *méně*, *blíže* . . cf. Trávníček, Mluvnice, p. 344. In the masculine the suffix had a disyllabic form, and the short root-vowel here may thus be due to the general shortening of stressed first syllable in polysyllabic words. The long vowel in Czech *výš*, *blíže*, Old Czech *chúze*, etc., may represent old acute or neo-acute, as may also the pleophony in Russian *мóложе*. In *hůře*, *méně* it must be neo-acute, as short rising vowels in the first syllable are not original.

In Serbo-Croatian we find *mlád* : *mlǝđǝ*, *krút* : *krǝćǝ*, *gúst* : *gǝšćǝ*, *bǝjel* : *bǝǝlǝ*, etc., Čak. (Novi) *mlǝjǝ*, *slǝjǝ*, *žǝćǝ*, *bǝljǝ*. These forms were originally polysyllabic forms, and are subject to the same rule in Serbo-Croatian as *mlazǝ*, *vyšǝ* in Czech. The adverbial neuter forms *vǝšǝ*, Čak. (Novi) *vǝšǝ*, *drǝžǝ*, *sǝšǝ* are of greater interest. As the definite forms in the neuter in the Novi dialect have *-ǝ*, there can hardly be any grounds for regarding *vǝšǝ*, etc., as «long» forms.

The combination Čak. *vǝšǝ* — Czech *kráce* — Russ. *дóроже* shows proto-Slavonic acute.

We are consequently faced here with the fact that in proto-Slavonic there was an alternation between circumflex in the positive and acute in the comparative:

\**moldǝ* : \**móld'e*; \**súxǝ* : \**súšǝ*.

Owing to the vowel shortenings which took place in the separate languages, it is impossible to ascertain to what extent the acute also occurred in the masculine and feminine and in the oblique cases.

We are dealing here with a real metatony, and not with retraction. This is in fact a proto-Slavonic instance of «métatonie rude». We also have other instances, such as the acute in the second member of compounds: Russ. *зóлото* : *позолóта*; *зóрод* : *озорóд*.<sup>87</sup>

I know of no instances of contrary metatony («métatonie douce») in the comparative. It is unlikely that this occurred, as adjectives with an acute root-vowel had the suffix *-ǝje-*, cf. Vaillant, Grammaire comparée, p. 255.

An apparent contrast occurs between the acute in forms with long root-vocalism and neo-acute, i.e. the secondary rising tone, in forms with short. For, as already mentioned, Old Czech *hůře*, *měně* suggest neo-acute. The Russian dialect form *боле*, (e.g. *ból'e* in Tot'ma, according to Broch *Описание одн. говора*, p. 128) agrees with this.

It is possible that we are faced here with the introduction of a rising tone in the short vowel, due to analogy as early as in proto-Slavonic times, i.e. \**gòr'e* for \**gǝr'e* owing to the influence of \**súšǝ*, etc., because neo-acute was the only rising intonation which could occur in a short vowel. It is also possible, maybe, to imagine a later lengthening of the root-vowel in Czech and Russian, due to the influence of long-vowel comparatives after the differences of intonation had ceased to exist. This would, however, presuppose that in Russian, too, the acute has retained its length longer than the circumflex, which in itself is incapable of demonstration.

#### VI. PRONOUNS.

These present a picture of considerable diversity, and it seems impossible to arrive at any clear definition of the original state.

In the personal pronouns Russian shows stress on the second syllable in the singular, and this is also the case in Serbo-Croatian: cf. Russian *ты*, *тебǝ*, *тебǝ*, *мóбóю* — Čak. (Novi) *tǝ*, *tebǝ*, *tebǝ*, *tǝbǝn*. Retraction in the instr. sing. is due to circumflex in the final syllable caused by contraction: \**-ǝje* > \**-ǝ* + *n*<sup>88,89</sup>. In the plural we find:

Russ.	Čak. (Novi)	Czech
<i>вы</i>	<i>vī</i>	<i>vy</i>
<i>вас</i>	<i>vās</i> (Št. <i>vās</i> )	<i>vás</i>
<i>вам</i>	<i>ván</i>	<i>vám</i>
<i>вамѹ</i>	<i>vāmi</i>	<i>vámi</i>
<i>вас</i>	<i>vās</i> (Št. <i>vās</i> )	<i>vás</i>

In Čak. and Czech, acute has been generalised in all the oblique cases. In Štok. we find circumflex in *vās*, and it is probable that this is the old genitive form with a secondary proto-Slavonic circumflex. It is possible that Kajk. (Prigorje, Rožić, Rad 116 p. 130) gen. acc. *vās*, loc. *vās*, is a survival of the original state of affairs.

The pronoun of the 3rd person shows end-stress in the singular in Russ. and Serbo-Croatian.

Russ.	Čak.	Štok.
<i>он</i>	<i>ón</i>	<i>ôn</i>
<i>она</i>	<i>onā</i>	<i>ona</i>
<i>онѹ</i>	<i>onǎ</i>	<i>ono</i>
<i>еѹ</i>	<i>égǎ</i>	<i>njēga</i>
<i>ей</i>	<i>né</i>	<i>njē</i>
<i>еѹ</i>	<i>émǔ</i>	<i>njěmu</i>
<i>ей</i>	<i>noj</i>	<i>njōj</i>
<i>еѹ</i>	<i>égǎ</i>	<i>njēga</i>
<i>ей</i>	<i>nū</i>	<i>njū</i>
<i>им</i>	<i>ín</i>	<i>njīm</i>
<i>ей</i>	<i>nún</i>	<i>njôm</i>
<i>нѣм</i>	<i>nen</i>	<i>njěm</i>
<i>ней</i>	<i>noj</i>	<i>njōj</i>

The instr. and loc. sing. masc. in Čak. show neo-acute, and this indicates that the stress was originally on -ь : \*jimǐ, \*jemǐ. Czech. *jím* confirms this. Russian has divergent accentuation in one particular instance, viz. instr. sing. fem. *ейю*. Čakavian shows the accentuation which was to be expected: *nún* comes from \*jeǵǵ > \*jǵ + n.

In the plural we find root-stress in the oblique cases in so far as this can be established:

Russ.	Čak. (Novi)	Štok.	Czech
<i>они</i>	<i>onǐ</i>	<i>oni</i>	<i>oni</i>
<i>их</i>	<i>nǐh</i>	<i>njih</i>	<i>jich</i>
<i>им</i>	<i>nín</i>	<i>njima</i>	<i>jim</i>
<i>их</i>	<i>nǐh</i>	<i>njih</i>	<i>je</i>
<i>ими</i>	<i>nǐmi</i>	<i>njima</i>	<i>jimi</i>
<i>них</i>	<i>nǐh</i>		<i>nich</i>

The forms show in most cases old acute in Serbo-Croatian, but Štok. *njih* points to circumflexion in the genitive. The Czech forms all point to circumflex, and this may be due to the influence of the genitive.

The pronoun *to* shows in the singular end-stress in Russian, just as *он* (Instr. sg. F. *móyo* here too forms an exception). In Serbo-Croatian Čak. instr. sg. M. N. *tín*, loc. *tón* and the oblique cases in the feminine show neo-acute, which again suggests old end-stress. Czech instr. sing. M. N. *tím* confirms this. Štok. *tǒgǎ*, *tǒmu*, Čak. (Novi) *tóga*, *tómu*, are deviations. Neo-acute *o* in Čak. suggests secondary stress, and it can then be assumed that the Russian accentuation, end-stress throughout the singular, was the original state.

In the plural Russian *mému* shows root-stress. Czech *těch*, *tém*, *těmi* suggest old circumflex, while the Čakavian forms *tih*, *tín*, *tími* show neo-acute, thus suggesting retraction. Štokavian *tjeh*, *tjem* may represent either of these intonations.

In Slovene the contrast shown by the pair *njih* : *těh* suggests that here the first pronoun had acute, while the second had circumflex.

The pronouns thus present great variations in accentuation. Owing to the pronoun's varied role in the sentence, where it operates sometimes stressed, and sometimes unstressed, and sometimes even with emphatic stress, it is quite easy to understand why it has undergone such a varied development. The reconstruction of the proto-Slavonic state of affairs is in many cases exceedingly difficult.

## VII. THE VERBAL SYSTEM.

In this chapter I shall go through the various finite and infinite verb categories, and try to dig down to the proto-Slavonic ictus and intonation. Where possible I shall, as in the case of the noun, introduce Baltic for purposes of comparison.

### A. Present.

The formation of the present in Slavonic is, as we know, of three different types: *e*-verbs (which include *je*- and *ne*-verbs), *i*-verbs and athematic verbs (1st person singular in *-mь*). Here, as in the case of nouns, I shall begin with the type which shows the clearest picture of ictus and intonation, viz. the *i*-stems.

#### 1. The *i*-stems.

A comparison between the various languages shows that the *i*-stems had three different types of accentuation, viz. (a) the constantly stem-stressed, (b) those with ictus on the ending in the 1st person singular, and otherwise stress on the preceding syllable and neo-acute, and (c) the end-stressed. I shall go through these in the order I have indicated above.

##### a. Constant root-stress.

The conjugation in the languages which have retained a free stress and/or a free quantity is as follows:

Russ.	Čak. (Novi)	Štok.	Slov.	Czech
-ба <sup>в</sup> лю	<i>bàvľn se</i>	<i>vidīm</i>	<i>vidim</i>	<i>bavīm</i>
-ба <sup>в</sup> ишь		<i>vidiš</i>	<i>vidiš</i>	<i>baviš</i>
-ба <sup>в</sup> ит		<i>vidī</i>	<i>vidi</i>	<i>bavi</i>
-ба <sup>в</sup> и м		<i>vidīmo</i>	<i>vidimo</i>	<i>bavīme</i>
-ба <sup>в</sup> ите		<i>vidīte</i>	<i>vidite</i>	<i>bavīte</i>
-ба <sup>в</sup> ят		<i>vidē</i>	<i>vidijo</i>	<i>bavi</i>

The circumflex in Slovene can be explained by inner Slovene tendencies (p. 26) if we assume an original acute. The general shortening in the separate languages of stressed long vowel in the first syllable of polysyllabic words does not permit this acute to be directly established. But the Slovene circumflex which does not pass its ictus on to the following syllable indicates that the original intonation was acute. This agrees with what we find in the nouns: the system demands rising intonation in the stressed syllable in paradigms with invariable ictus.

#### b. Recessive stress.

Russ.	Čak. (Novi)	Slov.	Czech	Slovincian
нош <sup>у</sup>	<i>pālĭn</i>	<i>mōtim</i>	<i>koupīm</i>	<i>mlóucq</i>
носишь (dial. носишь, etc.)	<i>pālĭš</i>	<i>mōtiš</i>	<i>koupīš</i>	<i>mlóucīš</i>
носит	<i>pālĭ</i>	<i>mōti</i>	<i>koupī</i>	<i>mlóucī</i>
носи м	<i>pālĭmo</i>	<i>mōtimo</i>	<i>koupīme</i>	<i>mlóucīmā</i>
носите	<i>pālĭte</i>	<i>mōtite</i>	<i>koupīte</i>	<i>mlóucicā</i>
носят	<i>pālĕ</i>	<i>mōtijo</i>	<i>koupī</i>	<i>mlóucou</i>

Here we find end-stress in the 1st person singular, and in the other forms stress with neo-acute on the syllable immediately preceding the ending.

As ictus falls on the final syllable in the 1st person singular, but on the syllable preceding the ending where this contains an *i* (or *ē*), and furthermore as the vowel of the stressed syllable outside the 1st person singular has neo-acute — and there must be an explanation for this — I consider it reasonable to assume that ictus on the syllable preceding the *i* (*ē*) is due to retraction. (To assume a throwing forward of the stress according to de Saussure's law in the 1st person singular would not explain the neo-acute; furthermore, no reliable support is available for the assumption that de Saussure's law operated in Slavonic. Cf. p. 15 ff.)

As an inner circumflex, which first arose in the separate languages, has in many cases passed its ictus on to the preceding syllable, and as retained ictus on the inner syllable in certain cases by comparison with Lithuanian can be shown to have had an acute, while we have no evidence

for the preservation of proto-Slavonic inner circumflex, I consider it a reasonable hypothesis that the assumed retraction is due to the fact that *i* was originally circumflex (cf. p. 44). I therefore believe that the following development has taken place within proto-Slavonic: \*kup'è, \*kupīši, \*kupīb ... > \*kup'è, \*kupīši, \*kupīb ...

#### c. End-stress

Russ.	Ukr.	Čak. (Novi)	Slov.	Czech
рож <sup>у</sup>	<i>yrý</i>	<i>želin</i>	<i>klečīm</i>	<i>budīm</i>
род <sup>и</sup> шь	<i>yrūu</i>	<i>želiš</i>	<i>klečiš</i>	<i>budiš</i>
род <sup>и</sup> т	<i>yrūm</i>	<i>želi</i>	<i>kleči</i>	<i>budi</i>
род <sup>и</sup> м	<i>yrū mó</i>	<i>želīmō</i>	<i>klečīmo</i>	<i>budīme</i>
род <sup>и</sup> те (Old R. and	<i>yrūmé</i>	<i>želītē</i>	<i>klečīte</i>	<i>budīte</i>
род <sup>и</sup> т dial. -umé) <sup>90</sup>	<i>yrām</i>	<i>želé</i>	<i>klečē</i>	<i>budī</i>

We are here dealing with marginal end-stress: where the ending terminates in a vowel it is this vowel which carries — or carried — ictus. Thus we have an explanation, too, for the neo-acute in the forms which have lost their old final vowel: Čak. *želiš*, *želi*, *želé* point back to an older \**želiši*,<sup>91</sup> \**želītē*, \**želētē*.

In old Russian, however, we find examples of root-stress, or stress on a verbal prefix or on the negation, in the 1. p. sg. For the Čudov NT (1348) the rule can be laid down that the 1. p. sg. has end-stress in the recessive flexions (type b, all stems); on the other hand, the stress is very often on the 1st syllable (which may be a verbal prefix or the negation) in the «end-stressed» *i*- and *e*-verbs: *в<sup>а</sup>рю* 23a, *в<sup>е</sup>лю* 21a, *с<sup>в</sup>ер<sup>и</sup>ю* 43b, *п<sup>о</sup>лож<sup>ю</sup>* 49a, *в<sup>л</sup>ож<sup>ю</sup>* 52a, *с<sup>т</sup>в<sup>о</sup>рю* 73b etc., *т<sup>в</sup>ор<sup>ю</sup>* 102b, *с<sup>т</sup>о<sup>ю</sup>* 78a, *п<sup>о</sup>гоуб<sup>л</sup>ю* 108b, *р<sup>а</sup>зд<sup>р</sup>аж<sup>ю</sup>* 10b, *н<sup>е</sup>м<sup>н</sup>ю* 119b, *н<sup>е</sup>п<sup>о</sup>иц<sup>а</sup>ж<sup>ю</sup>* 121a, *п<sup>о</sup>стыж<sup>ю</sup>с<sup>я</sup>* 128a (< \**п<sup>о</sup>стыж<sup>ю</sup>с<sup>я</sup>*, cf. p. 106 f); *д<sup>а</sup>ю* 49a, *р<sup>а</sup>сп<sup>н</sup>ю* 51a, *ж<sup>и</sup>в<sup>у</sup>* 122b, *р<sup>е</sup>к<sup>у</sup>* 129a, *п<sup>о</sup>т<sup>р</sup>яс<sup>у</sup>* 148b, *г<sup>р</sup>яд<sup>у</sup>* 155b, *п<sup>р</sup>ив<sup>л</sup>ек<sup>у</sup>* 48a. — On the other hand: *м<sup>о</sup>л<sup>ю</sup>* 161a, *от<sup>г</sup>пл<sup>а</sup>т<sup>ю</sup>* 141b, *х<sup>о</sup>ц<sup>ю</sup>* 141b, *с<sup>л</sup>оуж<sup>ю</sup>* 138b, *л<sup>ю</sup>б<sup>л</sup>ю* 128a, *г<sup>о</sup>н<sup>ю</sup>* 129a, *п<sup>о</sup>хож<sup>ю</sup>* 118b, *х<sup>в</sup>ал<sup>ю</sup>с<sup>я</sup>* 119a, *о<sup>у</sup>г<sup>ю</sup>* 109b, *п<sup>р</sup>иц<sup>п</sup>л<sup>ю</sup>с<sup>я</sup>* 105a, *нош<sup>ю</sup>* 94, *возв<sup>р</sup>ащ<sup>ю</sup>с<sup>я</sup>* 71b, *соуж<sup>ю</sup>* 69b, etc.; *ид<sup>о</sup>у* 52a, *п<sup>р</sup>ид<sup>о</sup>у* 159, *напиш<sup>ю</sup>* 145b, *неп<sup>о</sup>м<sup>я</sup>н<sup>ю</sup>* 145b, *посл<sup>ю</sup>* 141a, *нел<sup>ю</sup>ж<sup>ю</sup>* 136b, *иц<sup>ю</sup>* 122a, *каж<sup>ю</sup>* 113b, *не м<sup>о</sup>г<sup>о</sup>у* 49a.

Likewise in Uč. i chitr. we find *г<sup>о</sup>вор<sup>ю</sup>* (there times) besides *г<sup>о</sup>вор<sup>ю</sup>* (15 times), but *г<sup>о</sup>вор<sup>и</sup>тъ*, *г<sup>о</sup>вор<sup>я</sup>тъ*, etc. In Triod' postnaja 1621 we find *л<sup>е</sup>ж<sup>у</sup>* 127, and *п<sup>о</sup>ю* (66a, 70b, 86b, etc.) frequently occurs. In Ups. Ksl. fol. 44, 144b we find *с<sup>о</sup>т<sup>в</sup>ор<sup>ю</sup>*. Vasiljev (Kamora p. 47 f.) quotes a series of examples from other texts: *з<sup>о</sup>в<sup>у</sup>* Tr. P. 1589, *ж<sup>и</sup>в<sup>у</sup>* Tr. P. 1589, *в<sup>о</sup>зз<sup>о</sup>в<sup>у</sup>* Ap. 1564, *п<sup>р</sup>ив<sup>е</sup>д<sup>у</sup>* Tr. P. 1600, *п<sup>о</sup>ж<sup>е</sup>н<sup>у</sup>* Čas. 1565, etc.

Vasiljev quotes from modern Ukrainian dialects *бою* besides *що се боїш*, *боїт се*; *сиджу* besides *сидіш*, etc.

We are not dealing here with a retraction accompanied by a neo-acute. The stressed first syllable had a falling tone, as shown by the fact that the stressed syllable is not necessarily the one immediately preceding -у, -ю, but may be a prefix or a negation as well: cf. *положю*, *привлеку*, *непоукажю* (Čud. NT), *неоумру* Triod' P. 1589 according to Vasiljev l.c.

In this connection Vasiljev mentions the fact that in the case of a disyllabic prefix the stress in the 1. p. sg. is on the first syllable of the prefix, whereas in forms with retraction and neo-acute it is on the second syllable of the prefix: *отошлю* (Pogodin's copy of the Gennadij Bible) besides *отбшлем* (ibid.), *отбшю* (Pal. 16. century) but *отбшдуть* (Novgorod Chron.). In the texts specially treated by Vasiljev in his book, Sbornik Sofijskoj Bibl. No 1466 and in Psalter I. F. No 7, where an originally rising *o* is marked with a  $\wedge$  («kamora») over the letter, we never find this kamora in the 1. p. sg. in verbs of the type *пѡжроу*, *прѡлю*, but we sometimes find it in the other persons: *пѡдет*, *прѡидеть*, etc.

Examples such as the last-mentioned indicate that stress on the first syllable in the 1. p. sg. could occur even in verbs with recessive accentuation. However, the examples mentioned so far all belong to the type which has *ъ*, *ь* in the root syllable. In this type of verb examples of marginal accentuation — though evidently secondary — are quite frequent as early as in Old Russian. Besides *отобшю* (Pal. 16. century) Vasiljev quotes from the same text *побшютъ*, *побшется* with marginal accentuation (type c). Thus, in certain cases the stress on the 1st syllable in verbs of this kind may belong to a marginal paradigm. In *отошлю*, however, this does not seem to be possible, as we are dealing with a -*je*-stem.

Vasiljev even gives some examples of this stress in the types *ношу-ношишь*, *вяжю-вяжешь*, e.g. *прношу* Ocht. 1594, *да покажу* Novg. Chron., *воздѡжу* Čas. 1569, but states that here it occurs «гораздо реже».

In view of the general impression afforded by the Old Russian texts, and especially by the Čudov N.T., with regard to the distribution of end-stressed and root-stressed forms in the 1. p. sg., the question arises whether the cases of stress on the first syllable in the recessive type are not due to a late levelling, of the kind we find in nouns (O. R. *на небесехъ*; mod. Russ. *на смерть*, etc.).

If this is the case, the question next arises whether root-stress in the 1. p. sing. might not be of proto-Slavonic origin, and a relic from a period when the marginal paradigm was mobile. If this is so, this verbal class would agree with the Slavonic principle that marginal end-stress in one form presupposes stress on the 1st syllable and falling intonation in another form of the same word.

This would perhaps throw some light on the peculiar accentuation of polysyllabic verbs in Slovincian. Here the 1. p. sing. has stress on the 1st syllable (or a negation), while the other forms have stress on the last syllable of the stem, cf. Lorentz, Slovincz. Gram. p. 210: *třepjecq* : *třepieceš*, *sāvjejq* : *sāvieveš*, *dārūjq* : *darūješ*, *dūēnōsq* : *donīeseš*, and, with the stress on a prefix or a negation : *prānōsq* : *né prānōsq*, *né dopuomūoq* (Lorentz, Roczn. Sl. VII, p. 58). If this accentuation in the marginal type were of proto-Slavonic origin, we should expect in early Pomeranian: *\*dōnōsq* : *\*donesēš* > *dūēnōsq* : *donīeseš*, *\*dōrob'q* : *\*dorobīš* > *dūērobjq* : *derūēbjīš*. On this pattern this accentuation may have been generalised. It is common in Slovincian for one accentual type within each category to be generalised, once differences of intonation have disappeared.

For the Slovincian paradigm it might, however, be possible to find an explanation within the language itself.

In the 2. p. sg. imper. we find the same accentuation as in the 1. p. sg. pres., in contrast to the plural: *prāñesä*, *rūescegni*, *nāpjišä*, *dūērobji* but pl. *prāñesācä*, *rūescegnicä*, *nāpjišācä*, *dōērbjicä*.

The 2. p. sg. imper. agrees with the 1. p. sg. pres. in ending in a vowel which was originally stressed and in containing originally one syllable less than the other personal forms. Under these circumstances the question arises whether we are here faced with a special phonetic retraction in Slovincian. Where a particle is added the imperative retains the old stress.: *dežžī-lä*, *pomežā-mjä*.

It must be added that in this language the athematic verbs *dōum*, *mōum*, *jēm*, *vēm*, *jēm* and *-stōum* have their ictus retracted to prefixes in all personal forms except the 3. p. pl. *dūēdōum*, *dūēdōš* ..., *dēdāzou*. Here, however, analogy from the 1. p. sg. would be quite conceivable because of the agreement between all personal forms, other than the 3. p. pl., in the stem vowel and in the (original) number of syllables.

Nevertheless the Slovincian material does not seem to be quite clear.

In Bulgarian dialects, too, we sometimes find the stress on the first syllable in the 1. p. sg. of «end-stressed» verbs: *nūa*, *nuēu*, *nuē*, *nuām*; *vēta*, *vetēu*, *vetē*; *plēta*, *pletēu*, *pletē*. (Popivanov, *Софийския гъворъ*, Сборн. на бълг. Акад. XXXIV, p. 251). Further, in the central Rhodope dialect we find *plētq* (-am), *pletēš*, *pletē*, *pletēm*, *pletēte*, *pletō* (-ōt); *rēkq* (-am), *rečēš*, *rečē*; *sēdq* (-am), *sedīš*, *sedī*; but also *mōq* (-am), *mōžēš*, *mōžē*; *hōdq* (-d'am), *hōdīš*, *hōdī* (Miletič, *Die Rhodopemundarten* p. 154 ff.).

The state of affairs we find in Old Russian texts, compared to what we can observe in Bulgarian dialects, would seem to be most easily explained if we assume that in proto-Slavonic the 1. p. sg. in the marginal paradigms was stressed on the first syllable and had falling intonation, in other words that this flexion was mobile.



It seems reasonable to assume that this mobility consisted originally in an alternation between stressed first syllable in the whole singular and stressed final syllable in the other forms. This would best agree with what we find in Sanskrit (*émi*, *éši*, *éti*: *iváh*, *iháh*, *itáh*, *imáh*, *ithá*).

In Slavonic, as we shall see later, end-stress has been generalised in the athematic verbs, where it has spread to the singular: cf. the neo-acute in Čakavian *dán*, *dáš*, *dá* and Russian dial. *dacú*. It is therefore not surprising that generalisation of this kind has taken place in the *i*- and *e*-verbs too.

It is more surprising that the 1. p. sg. seems to have retained the stress on the 1st syllable in the *i*- and *e*-verbs. But here the influence of the recessive type (b) may have operated. Since the 1. p. sg., after the retraction of ictus from the inner syllables, had here become isolated as far as the ictus was concerned, it is conceivable that the 1. p. sg. of the mobile type could retain the old accent in contrast to the other forms.

The fact that we find end-stress in the 1. p. sg. in Serbo-Croatian, Slovene and — indirectly attested — in Slovak, is no decisive refutation of the thesis that the ictus of O. Russ. *зѡворю*, *пѡю*, etc., is proto-Slavonic. In these languages the 1. p. sg. in *-o* has been replaced by a form in *-m*. This *-m* has been added to the stem we find in the 2. 3. p. sg., etc.

The verbs we are here dealing with have infinitive either in *-iti* or in *-ěti*. Verbs in *-iti* are partly denominative and partly deverbative. The denominative verbs belong to the root-stressed type, if the basic word also belongs to this type: Russ. *мѣра*, etc.: *мѣрѣти*, S.-Cr. *mjěriti*, Slov. *měriti*.

Denominatives derived from columnally end-stressed and mobile words belong either to type b, or to type c. Possibly derivatives from columnally end-stressed words have originally been of type b, while derivatives from mobile words belong to type c: \**ženā*: Russ. *женѡ*, *жѣниши*, Čak. *ženiti*: *žēniš*, Slov. *ženiti*: *žēniš*. On the other hand \**gostь*: Russ. *гостѣ*, *гостѣши*, Serbo-Croatian *gostīš* Slov. *gostīš*. See van Wijk, Arch. f. sl. Phil. 37, p. 1f.

The deverbatives, too, both causatives and iteratives, are distributed among all three groups. To type *a* belongs a small group of causatives and iteratives, cf. Russ. *-бавѣти*, *вѣсѣти*, *плавѣти*, *-стаѣти*, *лазѣти*, *гребѣти*, *ѣздѣти*; Serbo-Croatian *bāviti*, *objesiti*, *plāviti*, *stāviti*, *lāziti*, *grābiti*, Slov. *jēzditi*.

It is difficult to explain just why these verbs belong to this type. We do, however, also find instances of fixed root-stress in other verbs of these same roots, so that it may be assumed that a root-stressed basic verb has determined the accentuation of the derivatives (causatives and iteratives), cf. Old Russ. *вѣсѣти*, Russ. *лѣзу*, *ѣду*.

Diels (Arch. f. sl. Phil. 31, p. 82 f), van Wijk (ibid. 37, 1 f.) and Vondrák (Spisy fil. fak. univ. v Brně 5, 1924) maintain that the deverbatives otherwise regularly belonged to type b (*ношѣ*: *носиши*: *несу*). I maintain, however, NTS XVI p. 263 ff, that the iteratives originally belonged to type b, and the causatives to type c. Cf. Old Russ. *взбоудѣти* 27a, *оборотиши* 77a, *положиши* 13b, *всадиши* 13b, *оудиши* 138a (Uč. i chitr.), *погубиши* 328a, *потопиши* 7a, etc. (Uloženiye), *свариши* (Domostroj 41), *прильпиши* (Ostrog Bible, Matt. 19), *оугасиши* (Triod' 1621 55b), Modern Russ. *сидѣиши*, *ложѣиши*, *налииши*, cf. Serbo-Croatian *lōžiti*: *lōžim*, *tōpim*, *učim*, *gūbim*, *mōrim*, *pōjim*, *gōjim*, *plōvim* (exceptions: *būditi*: *būdim*, *gāsiti*, *pāriti*, *vāriti*, *vārati*, *sāditi*, *lēpiti*), Slov. *gubim*, *-lozim*, *topim*, *učim*, *budim*, *sadim*, *gasim*, *varim*, *kazim*, *morim*, *pojim*, *gojim*, *plovim*, *lepim*.<sup>92</sup>

Verbs with their present in *i* and infinitive in *-ěti* regularly belong either to type *a* (Russ. *видѣти*, *вижу*) or to type *c* (Russ. *сидѣти*, *сѣжу*: *сидѣиши*). The Russian *ě*-verbs, which today belong to type b, did not originally belong to this type. Thus *вѣрѣтиши* has the lateral form *верѣиши*; the forms *мерѣиши*, *дерѣиши* are those commonly found in older accentuated texts (Uč. i chitr., Ulož.). The infinitive of the verb *смотрю*, *смотриши* was originally *смотрѣти*.

## 2. Thematic Verbs.

The thematic verbs show precisely the same types of stress and intonation as the *i*-verbs. Morphologically they fall into several groups, and I consider it best to divide this section into pure thematic stems, *ne*-stems and *je*-stems.

### Pure Thematic Verbs.

#### a. Constant root-stress.

To this type belongs a fairly small group of verbs, viz. those which in Church Slavonic have the form *lēzq*, *bōdq*, *lēgq*, *sēdq*, *krādq*, *jadq*.

Russ.	S.-Cr.	Slov.	Czech	Pol.
<i>лѣзу</i>	<i>būdēm</i>	<i>lēzem</i>	<i>lezu</i>	<i>będę</i>
<i>лѣзеши</i>	<i>būdēš</i>	<i>lēzeš</i>	<i>lezeš</i>	<i>będziesz</i>
<i>лѣзет</i>	<i>būdē</i>	<i>lēze</i>	<i>leze</i>	<i>będzie</i>

In Slovene and Kajkavian we find circumflexion, which may be due to levelling: in the case of the root-stressed *i*-presents and the root-stressed contracted *ā*-presents, circumflex appears to be capable of ex-

planation according to sound-laws. See page 26 ff. With regard to North Čakavian circumflex, which is probably also secondary (*krêneš, kriješ*...), see *ibid.* The short vowel in the root-syllable in Czech can be explained quite simply on the grounds that stressed long vowel in the first syllable of polysyllabic words has been shortened as in *jahoda*. In the 1st person singular phonetic development would have given \**lézu*, but here analogy with the other persons has operated.

It is not clear what is the explanation of the long vowel in Slovincian *bóuđq, lězq* (as opposed to *jāđq*) with the same vocalism as in the recessive type.

#### b. Recessive stress.

The most clearly established proto-Slavonic example of this type is the word *mogŏ*, as well as verbs with a semi-vowel in the root-syllable.

Russ.	S.-Cr.	Slov.	Bulg.	Czech	Slovincian
могý	mŏgu	mŏrem	mŏga	mohu	mùogq
мо́жешь (dial. мо́жешь etc.)	mŏžěš	mŏreš	мо́жешь	mùžěš	móužěš
мо́жет	mŏžē	mŏre	мо́же	mùže	móužā
мо́же м	mŏžemo	mŏremo	мо́же м(е)	mùžeme	móužemā
мо́жете	mŏžete	mŏrete	мо́жете	mùžete	móužecā
мо́гут	mŏgū	mŏrejo	мо́гатъ	mohou	mùogou

The proto-Slavonic paradigm appears fairly easy to reconstruct. We must assume a conjugation on the following pattern: \**mogŏ*, \**mŏžeti*, \**mŏžetb*, \**mŏžetm*, \**mŏžete*, \**mŏgotb*, \**mŏžeta*, \**mŏžete*. Agreement between Russian and Serbo-Croatian on this point is complete and decisive. In Czech the opposition *mohu* : *mùžěš* corresponds to the opposition in Russian *могý*: Russ. dial. *мо́жешь*, Serbo-Croatian *mŏgu* : *mŏžěš*.

As I tried to show in NTS XVI, p. 271 f, we can in Slovak find some trace of the accentual difference between the present forms of the *e*-verbs in the contrast between *e* and *ie* in the ending. *mŏžem, mŏžěš*..., *koleš, meleš, steleš, pišeš, kážeš, prijmeš*... besides *nesiem, nesieš*..., *pasieš, tečieš, vedieš*..., cf. Russ. *мо́жешь, ко́лешь, ме́лешь, сте́лешь, пи́ишь, ка́жешь, при́ишь*... besides *несёшь, пасёшь, метёшь, ведёшь*...

In Polish *mogę, możesz*... the neo-acute has left no trace. This is the rule with short neo-acute vowel in Polish wherever no semi-vowel follows in the next syllable.

In Czech and Slovincian there is no lengthening of the root vowel in the 3rd person plural. I believe this is due to the analogical influence of the 1st

person singular. The two personal forms had one feature in common, viz. that they lacked palatalisation of the final stem consonant. In verbs such as Czech *pěci*, Pol. *piec*, for instance, the 1st person singular and the 3rd person plural only differ in the quantity of the final vowel: Czech *peku* : *pekou* besides *pečeš, peče*..., Pol. *piekę* : *pieką* besides *pieczesz, piecze*, furthermore Czech *tru* : *trou* besides *třeš, tře*..., Pol. *umrę* : *umrą* besides *umrzesz, umrze*... In Lekhite we have in addition the special agreement in verbs in a dental: Slovincian *plùstq* : *plùtoq* besides *plieceš* (Pol. *plotę* : *plotą* besides *pleciesz*...). It would therefore hardly be surprising if in these languages a special association had arisen between the 1st person singular and 3rd person plural. It must also be this association which has operated where the 3rd person plural in the *i*-verbs in Polish has acquired the same consonant as the 1st person singular: Russ. *ви́жу* : *ви́дят, во́жу* : *во́дят, но́шý* : *но́сят* besides Pol. *widzę* : *widzą, wodzę* : *wodzą, noszę* : *noszą*.

It is remarkable that neo-acute in a short root-vowel is represented by length even in Slovincian in the word *mogŏ*. This cannot simply be explained on the grounds that the secondary nasalisation we find in *móužěš, móužā*... has made the vowel long. Nasalisation does not occur in all Kashubo-Slovincian dialects, cf. *móužěš* besides *móužěš* according to Lorentz, Slowinzisches Wörterbuch, p. 669. However, we have the peculiar case of *bóuđq*, which has old nasal, but lacks it (*bouđq*) in the same dialects which have *móužěš* (see Slwz. Wb. s.v. *bāc*, p. 19). Both these verbs also have a contracted form: *bóum, bóuš* (respectively *bóuš*, etc.), *bóu, bóumā, bóucā* and *móuš* (*móuš*, etc.), *móu, móucā*. Is it possible that in this case a mutual influence has operated?<sup>93</sup>

We find the same retraction, as already mentioned, in verbs with proto-Slavonic *z, ь* in the root-syllable. To this type belong Old Russian and Russian dialect *удý, úдешь, úдетъ* < \**jъdŏ* : \**jъdeši*. Cf. also Northern Great Russ. (*ímu*), *ím'os, ím'ot* (Jeremin, Guv. Novgorod, Sborn. 99, 5, p. 41).

This type is very widespread in older Russian. As examples I might mention: Uč. i chitr. (1647): *вѣ́дуть, вѣ́нмешъ, вѣ́змешъ, вѣ́ткнешъ, дѣ́вдуть, зѣ́гнетъ, перѣ́бють, нѣ́бьетъ, нѣ́шлетъ, прѣ́детъ, прѣ́люют, прѣ́льетъ, сѣ́жгутъ, сѣ́тмешъ, оу́мроутъ* (Stang, p. 61 f.); Uloženije (1649): *за́прется* 14b, etc., *о́бѣ́жжеть* 159a, *о́тѣ́мкнетъ* 145a, *о́тѣ́удеть* 15b, *нѣ́мрутъ* 195b, *прѣ́шлетъ* 14a, *розѣ́бють* 311a, *сѣ́лжеть* 96b... Examples from Modern Russian dialects: *на́йдем, нѣ́йдем* (Kašin, Tverskoj gub., Smirnov, Sborn. 77, 9, p. 139), *подѣ́ждем, подѣ́йдем* (Jurjevskij, uj., Černyšev Sborn. 71, 5, p. 13).

In Serbo-Croatian this accentuation is a fixed rule: cf. *pŏčnēm, nŏdmēm, ōtmēm, pŏdēm, rŏzdrēm, zŏprēm*... (cf. Leskien, Serbokr. Gram., p. 515). In Bulgarian we have the accentuation *дѣ́йда, зѣ́йда, ѓ́пра*.

In the Ljubljana Damaskine from the 17th century we find: *да ѱмра*, *да нѱна* (Argirov, *Сборн. за народн. умотвор.* XVI- XVII, p. 286). In Slovak we find traces of this accentuation in forms such as *žneš*, *začneš*, *zatneš*, *treš* (besides *trieš*), *dreš*, *mreš*, etc., cf. above and NTS XVI, p. 271 ff.

If we endeavour to discover the basis for type b in proto-Slavonic, we shall find that the group with a semi-vowel in the root is clearest. We are clearly dealing here with a type similar to Sanskrit *tudāti*. Certainly Renou, *Mélanges Vendryes*, p. 309 ff, has established the secondary character of this type, and it is possible that it did not arise until post-Indo-European times. But there is no reason why it might not have arisen in Slavonic in the same way as in Vedic.

In Slavonic ictus has been retracted from the stressed thematic vowel. The new ictus vowel is rising (neo-acute). This is apparent in Slov. *jámet*, *jámeš* ..., Čak. *jāmēn*, Slov. *žánješ* besides *žnješ*, Čak. *žānjēn*, etc. (Ramovš, *Slavia* II, p. 205 ff), cf. furthermore Old Russ. *перѣбыють*, *отѱмкнѣтъ*, *розѱбыють* ..., not *\*нѣребыють*, etc. It seems impossible to state whether in these cases the ictus was first retracted back to the semi-vowel and later, by a second retraction, to the preceding syllable, or whether the semi-vowel has been skipped. The first assumption has the advantage of not implying any new theory.

The reason why *mogō* belongs to the same type as *\*j̥mō* is not quite clear. This word seems to go back to an old perfect, which has been transferred to present inflection (cf. Gothic *mag*).

The retraction of the ictus in these present forms does not seem to be phonetic. A medial accented short vowel was rising in Slavonic, and ictus should not have been retracted from a vowel of this nature. Cf. Russ. *зѱмѱе*, *зѱнѱе*, *зѱмѱуть*.

Here the influence of the *i*-stems must have operated in one form or another. The lengthening of *e* in the Štokavian present conjugation shows the possibility of influence from the *i*-stems (possibly in connection with the contracted *a*-verbs.)

We have seen that in the genitive plural metatony made a long rising vowel falling. We expect the same result in a short rising vowel in a medial syllable. There is no reason to assume that a short vowel should be more capable of resistance than a long vowel. Štok. gen. pl. *vōlōvā* — with the same retraction as in *kōljēnā* — supports this point of view (see page 24 ff). If this is correct, we must assume that in proto-Slavonic, at a certain stage, falling short vowels could exist in medial stressed syllables. The moment falling short vowels of this nature arose in the system, the rising short vowels in medial syllables underwent a phonological change: from having no intonation in the phonological sense of the word they became

phonologically rising. Simultaneously the rising *e* in *\*možēši* was placed in opposition to the falling intonation of *i* in the type *\*nosīši*. At this stage type b of the thematic verbs might have been consolidated, as against types a and c, by acquiring falling intonation of the ictus vowel analogically: *\*nošō*, *\*nosīši*, *\*nosīt̃* called forth *\*mogō*, *\*možēši*, *\*možēt̃* instead of *\*možēši*, *\*možēt̃*. The development then proceeded purely phonetically and parallel, all falling vowels in a medial syllable throwing their stress back onto the preceding syllable:

<i>*nosīši</i>	> <i>*nōsīši</i>	<i>*možēši</i>	> <i>*mōžēši</i>
<i>*nosīt̃</i>	> <i>*nōsīt̃</i>	<i>*možēt̃</i>	> <i>*mōžēt̃</i>
<i>*nosēt̃</i>	> <i>nōset̃</i>	<i>*mogōt̃</i>	> <i>*mōgōt̃</i>

If we reject this explanation, which is based on analogical change of a medial stressed *ē* to *ě*, it is possible to accept another analogical development:

<i>*nošō</i>	= <i>*nošō</i>	<i>*mogō</i>	= <i>*mogō</i>
<i>*nosīši</i>	> <i>*nōsīši</i>	<i>*možēši</i>	= <i>*možēši</i>
<i>*nosēt̃</i>	> <i>*nōset̃</i>	<i>*mogōt̃</i>	> <i>*mōgōt̃</i>

The forms *mōžēši*, etc., may have been formed by analogy: *\*nošō* : *\*mogō* = *\*nōset̃* : *\*mōgōt̃* = *\*nōsīši* : x; x = *\*mōžēši*, as a result of which type b was again consolidated.

This type of explanation becomes still more natural if we assume that the 1. p. sg. of the marginally end-stressed verbs (type c of all classes) had the stress on the first syllable. In that case 1. p. sg. *\*mogō* must have agreed with *\*nošō* as against *\*něso*, *\*stōjo*.

Note 1. In Štokavian and Czecho-Slovak we also find this accentuation in certain *e*-verbs with infinitives in *-ati*: Serbo-Croatian *bērēm*, *dērēm*, *pērēm*, *žēnēm* but *zōvēm*; Czech *bēřeš*, *dēřeš*, *žēřeš*, *pēřeš* besides later *bereš*, *dereš*, *žereš*, *pereš*; Old Czech also has *zōveš*, *nazūveš* (Gebauer, *Hist. mluvnice* I, p. 588). Slovak has *bereš* (< *\*bēreši*, see above page 114), *dereš*, *ženeš*, *pereš*, *žereš*, *zoveš* (*zveš*) besides *berieš*, *derieš*, *perieš*, *zovieš*. On the other hand Čakavian (Novi) has *poberén*, *perén*, *derén*, *zovén*, Russ. *берѣшь*, *дерѣшь*, *зѱвѣшь*, Old Russ. *женѣуу*. From an I.-E. point of view, it would be difficult to explain why these verbs with full-grade root vowel should belong to the type *\*j̥meši*. The mobility of the *l*-participle — as we shall see below — is also an argument against this. It is possible that the *-a-* of the infinitive stems has contributed secondarily to place these verbs in a group with recessive accent, owing to the many *je*-verbs of this type with infinitives in *-ati*.

Note 2. While Slovak has a short *e* as thematic vowel in types a and b, but *ie* in c (see above), we find in Old Czech examples of lengthening outside type c as well. In Old Polish, too, we find a number of examples

of lengthening. The examples I have seen quoted are all words which belong — or have belonged — to types *a* and *b*. Cf. *bodzyee* B.Z., *naydzee* Glog., *mozee* Ak. Pr., *przissyqzee* ibid. *zisczee* (ibid.) «więc pod akcentem lub po akcencie» (Łos, Gram. I., p. 105). To these must be added *daruję*, *najdzi*, *bandzeem*, *możym*, *chczeemy*, *skazujeemy*, *przindzéce*, *pruidéte* (Miklosich, Lange vokale, p. 137); *przesiężesz* (Koch. Pslt.), *poczniész* (Sekl.), *przestaniész* (Sekl.), *będzisz* (Dod.), *bōdzié* BZ, *jidzi* (ib.), *wnidzi* (ib.), *wzidzi* (ib.), *dojedzi* (Blsk.), *siędzie* (ę = é), Leop.Lew., *rzeczy* (Art. M.), *możę* (Jabl.), *nadmię się* (Kor.), *wezmię* (A. Mrszt.), *poklni* (BZ), *ciągni* (R. Wiz.), *stani się* (Śst.), *chcę* (Grcz.), *możymy* (Pat. RAP.), *pnimy się*, (Pot. Pocz.) *żyjemy* (Sekl.), *każymy* (Fl. ps.), *bierzemy* (Groch.), *dziękujemy* (Org. Qu.), *bōdzicie* (BZ), *ćicie* (Szarg.) — Vondrák BB XXX, p. 113 (after Kalina).

The question now arises whether in Polish a lengthening of the thematic vowel has occurred, through the influence of the *i*-stems or the contracted *a*-stems. If so, this length must have been retained only in an unstressed syllable, while in a stressed final syllable it was shortened, irrespective of the fact that it was neo-acute.

In view of the lengthening of the thematic vowel, which we find in Štok., and in view of the traces of it to be found in Old Czech and Old Polish, one might even ask whether lengthening of the thematic vowel was proto-Slavonic. In this case in group *b* *\*možēši* would have been transformed, not to *\*možēši* but to *\*možēši* (cf. *\*nosiši*), with the same subsequent development as delineated above. It would however not be reasonable to assume the existence of a proto-Slavonic *ē* and *ō* only in one category. It would have to be assumed at the same time that the lengthening in the genitive plural, which we find in Serbo-Croatian, Slovene, Czech-Slovak and Polish, was also proto-Slavonic. Theoretically this would be possible, but the theory runs up against various difficulties. In the first place, in Serbo-Croatian we have *mōže* (Vuk, Rječnik) and *hōće*, with short *e*, besides *ē*. It would have to be assumed that these had been shortened owing to their frequent use as auxiliary verbs. In the second place, the lengthening in the thematic present is not found in Čakavian; and in the third place, we find no trace of lengthened *-e* in the present in Slovincian, where long-stage vowels have been well preserved, both in stressed and post-tonic syllables. This might suggest that lengthening was not even proto-Lekhitic.

#### c. End-stressed verbs.

This type is well known in all Slavonic languages:

Russ.	Čak. (Novi)	Slov.	Slovak.	Bulg.
<i>bedŭ</i>	<i>trēsén</i>	<i>plétem</i>	<i>nesiem</i>	<i>nesá</i>
<i>bedemŭ</i>	<i>trēsēš</i>	<i>pléteš</i>	<i>nesieš</i>	<i>nesémŭ</i>

<i>bedēm</i>	<i>trēsē</i>	<i>pléte</i>	<i>nesie</i>	<i>несé</i>
<i>bedēm</i> (White Russian dial. - <i>mō</i> )	<i>tresemō</i>	<i>pletémo</i>	<i>nesieme</i>	<i>несé мѡ</i>
<i>bedēme</i> (Russ. Church Slavonic dial. - <i>emé</i> ) <sup>94</sup>	<i>tresetē</i>	<i>pletéte</i>	<i>nesiete</i>	<i>несéте</i>
<i>bedŭm</i>	<i>trēsú</i>	<i>pletŭ</i> <i>pletéva</i> <i>pletéta</i>	<i>nesú</i>	<i>несáтѡ</i>

We are here dealing with a marginally end-stressed paradigm. The thematic vowel was neo-acute, which clearly emerges in the 3rd person plural in Čak. *trēsú*, Slov. *pletŭ*, and also in Slovak *-ie-*; i.e., we find a paradigm which is completely parallel to the one we found in the case of the *i*-stems. In early proto-Slavonic we must assume a paradigm; *\*nesq*, *\*neseši*,<sup>95</sup> *\*nesetŭ*, *\*nesemō* (-*mō*), *\*nesetē*, *\*nesotŭ*, *\*nesetā*, *\*nesetē*, which in later proto-Slavonic times develops into *\*nesq*, *\*neseši*, *\*nesetŭ*, *\*nesēmō* (-*mō*), *\*nesetē*, *\*nesotŭ*. For the accentuation of the 1. p. sing. and the question of the original mobility of the «end-stressed» types, see p. 110.

In Štok. the ictus is withdrawn from the third syllable, if the root-vowel is long: *trēsēmo*, *trēsēte*. In view of the fact that this is not the case in Čakavian, and furthermore as this rule is not to be found on Russian ground, it must be assumed that it is due to dialectal developments in Štokavian.

#### Stems in *-ne-*.

In Russian these stems may belong to all three types of accentuation: (a) *гібну*, *гібнешь* .. (b) *тонú*, *тонешь* .. dial. *тонешь*, (c) *стрельнú*, *стрельнешь* .. To type (b) in the literary language belong only words with a vowel before *n*. These words belong almost without exception to this type, provided the infinitive is end-stressed. In older Russian, Russian-Church Slavonic and Russian dialects, we find exceptions to this rule: *-вернú*, *-вэрнешь*, *-минѣтся* (Uč. i chitr., Stang, p. 61), *прикóснется* (Korm. 1650, 77a), *воспомянѣтся* (ibid. 100a), *воткнешь* (Uč. i chitr.), cf. *уснет* (Suzdalskij uj., Černyšev, Sborn. 71, 5, p. 18), *по вэрнешь*, *вэрнецца* (Kazanskij uj. Sborn 99, 3, p. 18). Slovak, too, shows traces of constant end-stress in *ne*-verbs: *minieš*, *vinieš*, *spomenieš*, etc. Unlike Russian, Slovak possesses this type precisely in verbs with the root-syllable ending in a vowel.

In Serbo-Croatian (Štok.) we only find types (a) and (b).

(a) *dignuti*, *dignēm*; *pūknuti*, *pūknēm*.

(b) *minuti*, *minēm*; *tōnuti*, *tōnēm*; *dāhnuti*, *dāhnēm*.

Corresponding to this is Čakavian (Novi):

(a) *gīnūt, gīnēn.*

(b) *dosēgnūt, dosēgnēn; odahnūt, odāhnēn.*

In agreement with this we find in Slovene:

(a) *vēniti, vēnem.*

(b) *kreniti, krénem; pahniti, páhnem.*

Note, however, *šapniti, šapnem.*

In Slovencian, as far as I can see, we only find traces of types (a) and (b):

(a) *krāsc, krādnā, krādnēš, gerund krādnoučā.*

(b) *cīgñouc, cīgñā, cīgñēš ... imper. cāgñi, gerund cīgñoučā.*

Owing to gerund *krādnoučā* — as opposed to e.g. *plotoučā, klāčoučā* — I assume that *krādnā* belongs to type (a), and not to type (c).

In Czech we have obvious examples of type (b): *táhnouti*, etc., cf. Polish *ciągnąć* — while types (a) and (c) cannot be distinguished phonetically.

It must be regarded as doubtful whether type (c) originally existed in the *ne*-verbs. The verbs belonging to this type in Russian are to a large extent clearly innovations which serve the system of aspects.

Retraction in type (b) must be explained as in *\*mogō, \*jǫdō*.

What is, however, striking in Russian is that type (a) has quite clearly received an accretion from a very definite quarter: *сдохнуть, ддохнуть* («perish») besides *дохнуть* («breathe») corresponds to Serbo-Croatian: *dāhnuti, dāhnēm, Čak. odahnūt, odāhnēn* (cf. Slov. *sáhnem, dáhnem*, Bulg. *дохна*) of type (b). We might have expected *\*схнуть, \*тхнуть*, cf. Pol. *schnąć, tchnąć*, Czech *schnouti*, Old Czech *dchnúti* (Modern Czech *dechnouti*). In the present of these verbs it looks as if there was originally an accentuation on the lines of type (b). The rising (neo-acute) semi-vowel has sometimes been treated as «strong» in the Slavonic languages, cf. Slov. *jámem, Čak. jāmēn, Slov. žánjem, Čak. žānjēn*, etc. This stressed rising semi-vowel (or the *o* arising from it) in a schema, which in Russian would have been: *\*схну : сдохнѣшъ, \*тхну, \*дохнѣшъ, ддохнет ...*, has been generalised, as a result of which the verbs have been transferred to type (a). As a rule, it seems that in Russian in words containing *з, в*, the form of the stem which contained a strong semi-vowel was generalised, if a heavy consonantal group could thus be avoided. Cf. *брѣсуть, брѣдутъ*; Old Russ. *двѣрехъ*.

#### Stems in *-je-*.

These fall into a great many sub-divisions, which from the point of view of accentuation must be distinguished from one another.

#### 1. *-je-* after a consonant.

These verbs mainly belong to two accentual types: (a) and (b):

- (a) Russian *плáчу (плáкати), пѣжу (пѣзати)*, etc.; Serbo-Croatian (Štok.) *plāčēm (plākati), rēžēm (rēzati)*, etc.; Čak. (Novi): *brīšēn (brīsat)*, 3rd pers. pl. *rīžā (rīzat)*, etc.; Slov. *māžem (māzati), rēžem (rēzati)*; Czech *maži (mazati), řeži (řezati)*.
- (b) Russian *пишѹ, пишѹшъ (писати)*; *колѹ, колѹшъ* dial. *колѹшъ (колѹти)*, etc.; Štok. *pīšēm (pīsati), kōljēm (klāti)*; Čak. *pīšēn (pīsāt), kōljēn (klāt)*, *glōjēn (glodāt)*; Slov. *pīšem (pīsāti), čēšem (česāti)*; Czech. *píši (psāti), váži (vázati)*; Pol. *wiąże (wiązać)*; Slovencian *pjišq (pjisac), līžq (lāzac)*, etc.

The accent in these types is quite clear on the basis of what we have stated above: in type (a) in Slovene, Kajkavian and North Čakavian we find the same circumflexion as in all the other root-stressed thematic stems.

In type (b) the suffix *-je-* must originally have been stressed, but later on the ictus was retracted as in the type *\*mōžēši, \*jǫdeši*. This type of verbs in *-je-* comprises in the first place a small group with the infinitive formed without suffix: Russian *колѹти, молѹти, борѹти, порѹти, полѹти*, and in the second place words with the infinitive in *-ati-*, a large group which in proto-Slavonic times must have enjoyed a period of considerable productiveness.

It would appear that proto-Slavonic had at least one verb of type (c):

Čak. *orēn, oremō* from *orāt* («plough») [but Štok. *ōrēm* from *ōrati*], Russ. *opēшъ* besides *ōpēшъ* from *opátъ* («plough»). In Russ. we also find *opjō, opēшъ* from *opátъ* «shriek».

#### 2. Vowel followed by *-je-*.

*-je-* added direct to the root.

The accentual types can be divided as follows:

##### 1. Words with *-ě-, -a-, -u-* in the root:

- (a) Russ. *сѣю (сѣяти), вѣет (вѣяти), лáю (лáяти), тáет (тáяти)*, etc. Serbo-Croatian *sijēm (sijati), vjēm (vjati), lājēm (lājati), tājēm (tājati)*. Čak. (Novi) *lājēn, kājēn se, grījēn (grijat)*. Slov. *sějem, vějem*. (On some verbs in *-ije-* see under 3).
- (c) Russ. *смеюсь, смеюшъся (смеяться), даю, даюшъ (давати)*; *кую, куюшъ (ковати)*. (Dial. *сѹю*, etc., Grot. Fil. razysk. I, p. 373). In agreement with this we have Čak. *dājēn, dājēš ... kījēn, snījēn, smījēn se*. Štok. has *smijēm se* but *dājēm, kījēm (kovati), snījēm (snovati), bljūjēm (bljūvati), kljūjēm (kljūvati), pljūjēm (pljūvati)*. Slov. *dajem (dajem), smějem se, kujem, bljūjem*,

*pljújem*, *kljújem* belong to the same type as in Čakavian and Russian (type (a) would have required neo-circumflex). It is uncertain to what extent type (c) is of proto-Slavonic origin in these verbs. Cf. Church Slavonic *kovъ* besides *kuju*, *kl'vu* besides *kl'uju*, Bulg. *клавъ*.

## 2. Verbs with *i* and *ь* in the root.

Russian shows no distinction of types: *бью*, *пью*, *шью*, *вью*, *лью* .. from *бить*, *пить*, *шить*, *лечь*. Old Russian *прѣлетъ*, etc., indicates type b. An exception is *брѣю* from *бръмъ* (parallel with *крѣю* from *крытъ*). But these words were originally divided among different types: Slov. *bijem* (*bíti*), *šijem* (*šíti*), *brijem* (*bríti*); Čak. (Novi) *ubije*, *šijēn*, *vije*. (Type a).

Slov. *lijem* (*liti*), *pijem* (*piti*), *vijem* (*viti*); Čak. *pijēn* (and *pjēn*), *zavijē* (Type c).

In Štok. the difference between these types has been abandoned, and type (a) (as in Russ. *брѣю*) has triumphed. Thus we find *bijēm*, *pjēm*, *šijēm*, *vijēm*, *lijēm*. But here Čakavian and Slovene have undoubtedly retained an original distinction between different proto-Slavonic types. The difference between these two types, which also appears in the 2nd and 3rd person singular aorist and in the perf. part. pass., has been dealt with by van Wijk in RESl. III, p. 40 f.

3. Verbs in *-yje* and certain verbs in *-ujje* are accented according to type (a): Russ. *крѣю*, *мѣю*, *вѣю*, *рѣю*, *нѣю*, *чѣю*, *обѣю* — Serbo-Croatian *krījēm* (*kríti*), *mījēm se*, *vījēm*, *čūjēm se*; Čak. (Novi) *umījēn se*, *čūjēn*, *obūjēn*. — Slov. *krīješ*, *mīješ*, *rīješ*, *čūješ*, *obūješ*.

Štok. *dbuješ* (thus Vuk) besides *izuješ* (Vuk) and Ozrinići *obūješ*; *ubijēm*, *pōkrijēm*, *pōpijēm* are peculiar. Here there is no possibility of a secondary circumflexion — as in Čak. *umījēn se*, *obūjēn* — having taken place, as *u*, *i* are short even where they have passed on the stress to the prefix. The point de départ may possibly have to be sought in the type *pōpijēm*, etc., i.e. the accentuation may be of the same type that we find in *zāprēm*, Old Russ. *прѣлетъ*, etc., although it is not clear why the *i*-vowel in *pōpijēm*, etc., has lost its ictus. Belić (Изморуја II, 2 p. 159) assumes that the original forms were of the type (\**pyjēši*): \**pōpyješi* and that the *i*- (for *ь*) is due to the influence of the infinitive.

If this is right, Old Russ. *прѣлетъ* (type b), etc., represents the proto-Slavonic state of affairs, as against Čak. *popijē*, etc., (type c), which may have deviated from type b because of the long root-vowel (introduced secondarily). In verbs where *-y-* goes back to *-ej-*, which may be the case in some instances (*vyje* = Lith. *vejù*?), accentuation according to type c is surely old.

Vocalic suffix followed by *-je-*.

These instances all belong to type (a), i.e. ictus was originally placed either on the root-syllable or on the vocalic suffix.<sup>96</sup> Thus we find Russ. *ржѣвеет*, *умѣю*, *радуюсь*, *ночю*, *дѣлаю*, *ломѣю*; Čak. *rādujēn se*, *kupūjēn*.

The verbs which present certain difficulties are those in *-aie-*, and the difficulties are all the greater because the phenomena belong to the separate languages. For this same reason they lie outside the scope of this work. They are, however, of importance to our understanding of Slavonic metatony as a whole, and for that reason I shall deal briefly with them here.

In all Slavonic languages, apart from the bulk of the Russian language area, we find examples of contraction of *-aie-* to *-ā-*, to a varying extent in the various languages. As the ictus in these formations lies either on the root-syllable or on the *-a-* but never on *-ie-*, the contractional vowel, in cases where ictus was on the *-a-*, will have falling intonation, cf. Čak. (Novi) *kopāš*: Russ. *конѣушъ*. This falling intonation, in varying degree in the various languages, then results in retraction of ictus to the root-syllable, accompanied by neo-acute.

In Serbo-Croatian we thus find

<i>čūvām</i>	<i>čūvāmo</i>
<i>čūvāš</i>	<i>čūvāte</i>
<i>čūvā</i>	<i>čūvajū</i>

The circumflex in Štok. has arisen from neo-acute (cf. Čakavian). The form *čūvajū* shows that ictus has only been retracted from a contracted vowel, in other words is a direct result of contraction.

In Čak. (Novi) we find from inf. *pītāt*:

<i>pītān</i>	<i>pītāmo</i>
<i>pītāš</i>	<i>pītāte</i>
<i>pītā</i>	<i>pītajū</i>

with neo-acute root-vowel, and with secondary introduction of the recessive accent in the 3rd person plural as well.

With root-stress we find: Čak. *pivat*: *pīvān*, *pīvāš*, *pīvā*, *pīvāmo*, *pīvāte*, *pivajū* — Štok. *glēdām*, *glēdāš* .. *glēdajū*.

In Slovene *stōpam*, *stōpaš* .. *stōpajo* from *stopāti* (*stōpati*) show the same development as Čak. *pītān*, etc.: retraction and neo-acute. Cf. Russian *cmynāmъ*, *cmynāeушъ*. With root-stress we find e.g. *dēlam*, *dēlaš* .. *dēlajo* from *dēlati* (cf. Čak. *dělān*, *pivān* and Russ. *dēлаю*). Neo-circumflex is presumably due to length in the following syllable.

Length in the first syllable in Czech, too, derives from neo-acute: *čítām*, *dávām*, *bývām*, *stoupām*, cf. Russ. *умѣю*, *бывѣю*, *cmynāю*. With old root-stress we find e.g. *dělām*, cf. Russ. *dēлаю*.

With length representing neo-acute we find in Slovincian: *třĩmq, třĩmōš, třĩmā, třĩmāmā, třĩmācā, třĩmōu*, infinitive *třĩmac*. In the same way *gāuda, gādac* (Russ. *задáю, задáмы*), *dvjǫg* : *dvjǫgac*, etc. Cf. Polish *stapam* (and secondary *stapać*).

With root-stress we have *kāšlq* (coughs), cf. Russ. *кашляю*.

In Russian we only find contracted forms in some dialects. In literary Russian we have *конáеишъ, ступнáеишъ, дéлаеишъ* .. But in Ublja (Broch, *Угорусское нарѣчїе села Убли*, p. 106), we find:

<i>byvāui</i>	<i>byvāieme</i>
<i>byvaš</i>	<i>byvāiete</i>
<i>byvat'</i>	<i>byvāiut</i>

This paradigm shows with great clarity the relationship between contraction and retraction.

In Bulgarian we find contraction and retraction in verbs of the type: *núma мъ, númaиъ, núma, núma ме, númate, númatъ* — but aorist *numāxъ*, perf. part. active *numālъ*. Here we have contraction also in the 3rd person plural, and retraction is in harmony with this.

The role played by contraction within the system varies from one language to another.

The main tendency is probably as formulated by Vaillant (Grammaire comparée des langues slaves, p. 197 f): «Les langues slaves, en dehors du russe, opposent généralement un type du présent contracté en *-ā-* de *-aje-*, à l'infinitif en *-ati* : pol. *działać* «agir», 3e pers. sing. *działa*, et un type à thème monosyllabique de présent non contracté en *-aje-*, avec infinitif en *-ajati* : s.-cr. *lājati* «aboyer», 3e pers. sing. *lājē*, pol. *lajać* «gronder», *laje*».

In Bulgarian, however, we find a fairly extensive group with present tense in *-aje-* also in derived verbs with an infinitive stem in *-a-* (not *-ajā-*): *zadāя, dьlbāя, жelāя*, etc. (Beaulieux, Gr., p. 235 ff). These questions of word formation only indirectly concern our subject.

In the contracted verbs we do not always find retraction of the accent in South Slavonic.

The situation is comparatively clear in Čakavian (Novi). Here we find no retraction to a short root-vowel (cf. Vondrák, Vgl. Gr. I s. 249):

<i>kopān</i>	<i>kopāmo</i>
<i>kopāš</i>	<i>kopāte</i>
<i>kopā</i>	<i>kopājǫ</i>

Owing to levelling the 3rd person plural has *-ājǫ* instead of *-ājū*. In this way are conjugated *česljān, igrān, devetāmo, krepā, omotā*, etc., as opposed to *pitān, razbijā, začārā, dávā*, etc.

A third group comprises the constantly root-stressed verbs (cf. above): *pivān, pobirān, čitān, dělā, gljēdā, imāš* .. (see Belić, Izv. 14, p. 246 ff).

In Slovene the main principle for the retraction of the stress seems to be the same as in Čakavian:

1. *kópati* : *kopām, igrām, krevljām, omotām, končām, sedlām* ..
2. *stopáti* : *stópm, dávam, razbijām, gíbam, méšam, stréljam* ..
3. *dělati* : *dělām, glēdam, hītam, pobīram* ..

In Čakavian, however, the distribution of these words in groups 2 and 3 is somewhat different. Thus, according to Čakavian we should expect *čitati, pivati* to have belonged to 3, but in Slovene we find *čitati, čítam; pivati, pívam*.

In Štokavian the rule was in the main the same as in Čakavian and Slovene. We find:

1. *vjenčām, orušām, vèslām, zījām (zjām), imām, čitām* ..
2. *pítati, pītām; bādām, vīdām, vījām, vřzām, gībām, dávām* ..
3. *pādām, glēdām, hītām* ..

There are, however, certain differences from Čakavian. In the first place *kōpām (kòpati), igrām (igrati)* belong to type 2. In the second place there are certain differences with regard to distribution of 1 and 3: viz., we find in Štokavian (in the literary language) *čitām, imām*, while Čak. (Novi) has *čítām, imām*.

The question of what is the proto-Slavonic basis for the distribution of the *-aje-* verbs among root-stressed and suffix-stressed, is one with which I cannot deal here.

### 3. Athematic verbs.

Slavonic has preserved only a few of these verbs, viz. those that are represented by Church Slavonic *jesmь, damь, jamь, vědě (věmь), imamь*.

If we consider the accentuation of these verbs in the separate languages we shall find the following situation:

Čak. (Novi):	<i>dán</i>	Štok.	<i>dām</i>	Slov.	<i>dám</i>	
	<i>dáš</i>		<i>dāš</i>		<i>dáš</i>	
	<i>dá</i>		<i>dā</i>		<i>dá</i>	
	<i>dāmō</i>		<i>dāmo</i>		<i>dāmo</i>	<i>dāva</i>
	<i>dā(s)tě</i>		<i>dāte</i>		<i>dāste</i>	<i>dāsta</i>
	<i>(dajú)</i>		<i>dādū</i>		<i>dadó</i>	

In the case of Serbo-Croatian-Slovene these paradigms provide a clear prototype with neo-acute in the root-syllable in the singular, and end-stress in the plural and dual.

This accentuation is confirmed in West Slavonic:

Czech	<i>dám</i>	Slovincian	<i>dóum</i>
	<i>dáš</i>		<i>dáuš</i>
	<i>dá</i>		<i>dáu</i>
	<i>dáme</i>		<i>dóumä</i>
	<i>dáte</i>		<i>dáučä</i>
	<i>(dajť)</i>		<i>dājou</i>

The Czech long vowel, however, besides neo-acute and (in monosyllabic and disyllabic forms) old pretonic length, may represent a stressed acute. In Slovincian *dóumä*, *dáučä*, the latter would hardly agree with sound laws.

If we now consider East Slavonic, we shall find a similar picture. In modern literary Russian the flexion has admittedly undergone very considerable changes: *да м*, *даиь*, *даст*, *дадүм*, *дадүме*, *дадүм*. The 1st and 2nd person plural are innovations; the 3rd person plural has acquired *-үм* instead of older *-ам*, but the end-stress is the same as we find in Serbo-Croatian and Slovene where the form have been transformed in the same way as in Russ.: Serbo-Croatian *dádū* = Slov. *dadó*. In Russian Church Slavonic we find *дадѣмъ*. In North Great Russ. we find 2. p. sg. *dasí*. (Guv. Novgor.; Jeremin, Sborn 99, 5, p. 44).

Furthermore we find:

Ukr. <i>да м</i>	White Russ. <i>да м</i>
<i>дасі</i>	<i>дасі</i>
<i>дасть</i>	<i>дасьць</i>
<i>да мѳ</i>	<i>да мѳ</i>
<i>дасьтѳ</i>	<i>дасьцѳ</i>
<i>дадүмъ</i>	<i>дадүць</i>

The occurrence in Russ. Church Slavonic of *дасі*, *дамы*, *дасте* besides *дадѣмъ* (*дадүмъ*) is undoubtedly due to the fact that the first-mentioned three forms were unknown in the Great Russian dialect which determined the accent of Russian-Church Slavonic words having identical forms in Russian and Church Slavonic. At the time when the Great Russian-Church Slavonic accentuation was stabilised, *даиь*, *дадүмъ*, *дадүме* were probably the spoken forms in this dialect, besides *дадѣмъ* (*дадүмъ*). The Čudov NT has *дамы* 135a, *ямы* 111b.

I assume, therefore, that the following proto-Slavonic accentuation can be reconstructed for this word: *\*dámь*, *\*dasí*, *\*dástь*, *\*damò* - *\*dámь*, *\*dastè*, *\*daděť*, *\*davě*, *\*dastà*.

As the forms where this was possible accented the last syllable, it is natural to explain neo-acute in the other forms by retraction. The paradigm then points back to an older:

*damò*, *\*dasí*, *\*dástь*, *\*damò(-ò)*, *\*dastè*, *\*daděť* ..

i.e. to a marginally end-stressed paradigm.

It seems probable that Indo-European did not possess end-stressed athematic paradigms, but only mobile athematic paradigms with ictus on the root- or suffix-syllable in the singular, and on the ending in the plural and the dual (cf. Sanskrit *dvéšmi*, *dvéksi*, *dvéšti* : *dvišmah*, *dvištá*, *dvišánti*). We must therefore assume that the mobile present paradigm in Slavonic has been transformed to a marginally end-stressed, so that even the final *-i* < Indo-European *\*-i* has become stressed. Here we find confirmation of our reconstruction of the thematic flexion of type (c), where we postulated a proto-Slavonic *\*bereši*, *\*beretì*, *\*beretì*<sup>97</sup>

The verb *\*ěsti* (to eat) had a parallel conjugation to *dati*. In Russian the form *едѣм* has still been preserved in the 3rd pers. pl. The old ending has also been preserved in Czech *jedí*. As far as this verb is concerned we must assume the same proto-Slavonic accentuation as for *dati*. Cf. also the Lith. present participle *edās*, *duodās*.

The verb *věděti*, as we know, has in the 1st person singular an older form *vědě*, beside *věmь*, in Church Slavonic. This is also known in Russian, where both Church Slavonic *вѣдѣ* (Kormčaja 1650, 76b and others), and the modern Russian particle *ведь* point to old root-stress. Russian Church Slavonic 3rd pers. pl. *повѣдѣмъ* (Korm. 1650 51a), besides *дадѣмъ*, *ядѣмъ*, also indicates fixed root-stress of this word in Russian. In the Čudov NT, however, we find *вѣсѣ* 110b, *вѣстѣ* 135a besides *вѣдѣ* 66b, *не вѣдѣмъ* 49b. In Čakavian (Novi), this verb is stressed in exactly the same way as the two preceding ones: *povín*, *povíš*, *poví*, *povímò*, *povístè*, *povídú*. The same is the case in Slovene. It cannot be denied, however, that both the infinitive Slov. *vědeti* and Russian *вѣдомо* suggest an original acute root-stress in this verb.

For the present of *byti* we find in Štokavian as orthotone forms *jěsam*, *jěsi*, *jěst*, *jěsmo*, *jěste*, *jěsu*. The forms for the 1st pers. sing. *jěsam* < *\*jesàm* and the 3rd pers. pl. *jěsu* are due to transformations. The 2nd pers. sing. and the 1st and 2nd pers. pl. show old end-stress. In Čakavian (Novi) we find the orthotone forms *sán*, *sě*, *jé*, *smò*, *stě*, *sú*. The form *sú*, with its neo-acute, points to *\*sotì*, the form we should expect in a paradigm with end-stressed forms in the 1st and 2nd pers. pl. In the 3rd pers. sing. *jé* the *e* has been lengthened. The neo-acute suggests that at the time it was rising: *\*jěstь* < *\*jestì*, which would agree with 2. p. sg. *\*jesì*. The neo-acute in the 3rd pers. pl. is to be found again in Czech *jsou*, Pol. *są*, Slovincian *sou*.



In Russian-Church Slavonic we find *écьмь, ecú, écьмь, ecьмь, ecьмь, coymь* (Kormčaja 1650). Surprisingly enough we occasionally come across *écьма, écьмь* in the dual. The only explanation of this must be that the dual was unfamiliar to spoken Russian, and that for that reason a purely Church Slavonic pronunciation was retained in this case. At the same time these forms show that end-stress in the other forms was pure Russian.

Consequently for this paradigm, too, I believe a complete end-stress must be assumed in proto-Slavonic.

In a category of its own we find the verb *imamь*. In Čak. (Novi) we find *imān*, with which Bulgarian *имама* (and Russian-Church Slavonic *имама*) agrees. Slovene *imām* also shows original stress on the first syllable. On the other hand Štok. has *imām*. Owing to the agreement between Slovene, Čakavian and Bulgarian, I am inclined to regard root-stress in *imamь* as original in the singular. The transfer of ictus to the next syllable in Slov. *imām* shows that *i(jb)* in the first syllable was falling (long or short). This suggests that the word was originally mobile, and Štok. *imāmo, imáte* may well be the direct continuation of the end-stressed old plural forms, while the singular forms, by analogy, have had the accent thrown forward on the pattern of *lòmīm : lomímo*, etc. I thus believe the Serbo-Croat. dialects together combine to provide evidence for proto-Slavonic *\*jīmamь, \*jīmaši . . \*jīmamò (-ò), \*jīmatè*. Cf. Čud. N.T. *u.mamé* 150a, etc., besides *u.mamé* 144b, *u.mat* 100b.

### B. Aorist.

Apart from Serbo-Croatian (Štokavian), Bulgarian and Sorbian, the aorist has gone out of use in all the living Slavonic languages. We shall consequently have to base our observations in the main on Štokavian and Bulgarian. In Russian-Church Slavonic accented texts, too, we find a great many accented aorist forms. However, their accentuation cannot with any real measure of certainty be regarded as pure Russian. In this connection I shall first consider the Serbo-Croatian system. If we start by investigating aorists with non-monosyllabic 2nd and 3rd pers. sing. we shall find a fixed rule, viz. that all forms apart from the 2nd and 3rd person singular have the same stress as the infinitive. The 2nd and 3rd person singular in some cases have another stress. This contrast is due to the fact that the other personal forms are sigmatic aorists, while the 2nd and 3rd person singular are formed from asigmatic forms (imperfects, thematic aorists or other asigmatic aorists), or have been adapted to forms of this kind. We shall now deal with the 2nd and 3rd person singular, where we shall find the following types.<sup>98</sup>

Let us first consider aorists with *-oh-* outside the 2nd and 3rd person singular:

The stress in the 2nd and 3rd pers. sing. is regularly found on the first syllable. Where it was originally falling it is retracted to a preposition:

*plēsti, plētēm : plēte, zāplete*  
*trēsti, trēsēm : trēse, istrēse*  
*prēsti, prédēm : prēde, òprēde*  
*sjēsti, sjédēm : sjēde, zāsjeđe*

According to Vuk (cf. Leskien, Gr. p. 542), the following are exceptions:

*mòci, mògu : mòže*  
*lěci, lěžēm : lěže*  
*iti, idēm : ide*  
*rěci, rěčēm (older: rēcēm) : rěče, izrěče*

— and furthermore words of the *ne*-class with suffix-stress in the infinitive, provided they form the aorist in this manner:

*māknuti, -māci, māknēm : māče, namāče*  
*tēgnuti, tēgnēm : tēže, istēže, etc.*

This system tells us a great deal about the accentuation of the thematic verbs as a whole. In the *e*-verbs we are dealing in the 2nd and 3rd person singular with old imperfects. The accentuation *plēte, trēse*, is what we should have expected from the Indo-European point of view in the present stem of a thematic verb with full grade vowel in the root-syllable: cf. Sanskrit *bhárati*<sup>99</sup>. Any attempt at explaining this accentuation on the basis of some sort of analogical influence would prove very difficult. This accentuation occupies an isolated position within the aorist paradigm. It is consequently my belief that we are here face to face with the original stress of the present tense in the singular of the *e*-verbs with *e*-grade.

The surviving Slavonic present stress in these verbs is peculiar. It is of type (c), viz. marginal end-stress, and I can only explain this phenomenon as follows:

Behind the surviving marginal end-stress in the proto-Slavonic present of these verbs lies a stage with mobile stress, viz. *\*plētq, \*plēteši, plēteti : pletemò/mà, \*pletetè, \*pletotb̃*. A relic of this stage is to be found in the aorist *plēte*, etc. (old imperfects). The marginally-mobile stress has given way to end-stress, as we have seen in the athematic verbs.

If we are right in assuming that the 1. p. sg. has retained the stress on the 1st syllable in certain separate languages down to comparatively

recent times, and in some dialects right up to the present day, this too is an indication that our theory is correct.

The root-stressed presents (accentual type [a]) have root-stressed 2nd and 3rd person singular aorist with acute root-vowel:

*sjěsti, sjědēm : sjěde.*

The intermediate type, with acute and root-stress in the infinitive, and end-stress in the present, has circumflex in the aorist:

*prěsti : prědēm : prěde*

*sjěci : sijěcēm : sijěče.*

This supports the suggestion I have advanced above. These words have acute root-syllable in the infinitive. If the end-stress in the present goes back to an old mobile stress, we should have expected the singular to have had analogical circumflex, and this in fact is what we find in the 2nd and 3rd person singular aorist, which, being original imperfects, represent the present stem. This provides a perfect parallel to the type *\*nāgō : \*nagā*, *\*golvā : \*gclvō* as opposed to Lith. *nuogas : nuogā : galvā, gálvā*, p. 9 ff.

In the same way the accentuation *mōže, ide < \*možē, \*idē* confirms my belief that the present of these verbs originally accented the thematic vowel.

The accentuation in the Bulgarian literary language *reće : можé* (cf. below) agrees with what has been said above.

In Serbo-Croatian in verbs in *-iti* we always find stress on the first syllable in the 2nd and 3rd pers. sg. aor. The ictus is transferred to a prefix. The final *-i* is long:

*gāziti, gāzīm : gāzī, pōgazi*

*čīniti, čīnīm : čīnī*

*nōsiti, nōsīm : nōsī, dōnosi*

*bēsediti, bēseditīm : bēseditī, prōbeseditī*

The type *gāzī* is clear, and the same is true of the type *čīnī*, if we assume that here too the marginally-end-stressed type (c) at one time replaced a marginally-mobile type.

The type *pōgazi*, however, must be secondary, as the ictus cannot, according to sound laws, be retracted from an originally acute root-syllable. This shows a tendency to form analogical forms with the accent on the first syllable. In the same category we have the type *bēseditī, prōbeseditī*.

The type *nōsī, dōnosi* must also be regarded as due to this tendency. We should have expected *\*nōsi* (*\*dōnosi*) cf. *mōže*. The type *čīnī, ūčīnī* would appear to have influenced the other types.

The aorist of verbs in *-ěti* has the same stress as in the infinitive: *vidjeti : vīdje; gōrjeti : gōrje : ūmjeti : ūmje*.

In the case of the 2nd and 3rd person singular aorist in *-a* of verbs in *-ati* the rule applies in the Serbo-Croatian literary language that, if

the root-vowel is long, the old ictus is on *-a*, which is short. If on the other hand the root-vowel is short, ictus in most cases<sup>100</sup> falls on the first syllable with retraction to verbal prefixes, and the *-a* is long.

*pīsati : pīsa, napīsa* *prs. \*pīsje<sup>100</sup>*  
*pītati : pīta, napīta* *prs. \*pītajē<sup>100</sup>*  
*vjenčāvati : vjenčāva* — but:  
*ōrati : ōrā, ūzorā* *prs. \*ōr(j)jē<sup>100</sup>*  
*kōvati : kōvā, ōkovā* *prs. \*kōvē<sup>100</sup>*  
*igrati : īgrā, zāigrā.*

Comparison with the accentuation of the present is of no assistance here, as these aorist forms do not represent old present stems (imperfects). In the case of *pīsati, kovati*, etc., we are dealing with a «second stem» in *-a*, which according to the Indo-European definition is an aorist. This aorist form in *-ā* is root-stressed (and not mobile) in Lithuanian: *sūko, vilko : nesūko, nevilko*.

The form *pīsa* suggests, however, that forms with ictus on *-a* also originally existed. As the short *a* recurs in the *je*-verbs with an infinitive in *-ati* whose aorist in the 2nd and 3rd person singular has become a monosyllabic form (*slā*), the question arises whether the end-stressed *-a* originally belonged to the recessive type (b)<sup>101</sup>, as well as to the denominative and deverbative verbs with the present in *-ajō*, (where no «second stem» occurs, and where we consequently may expect old *s*-aorists in all forms). In this case *kōvā*<sup>102</sup>: *pīta, pīsa* represent the old forms. I believe that the dependence of the stress on the quantity of the root-vowel is secondary in Štokavian, and in agreement with tendencies which we can otherwise observe in this dialect (e.g. in the present participle).

In Štokavian the aorist in *-nu < \*-nō* follows absolutely similar rules:

*tīnuti, tīnēm : tīnu, pretīnu*

*tōnuti, tōnēm : tōnū, pōtonū*

*gīnuti, gīnēm : gīnū*

Here *-nō* represents either the 2nd and 3rd person singular *s*-aorist — in which case we might expect the same stress as in the infinitive, and *gīnū* would be in conformity with sound laws, while *tōnū, pōtonū* would represent a secondary accentuation like *nōsī, dōnosi* — or *-nō* represents the 2nd and 3rd person singular imperfect of verbs in *\*-neu-*. In this case we should expect stress on *-nu* in words of type (b). As type (c) does not occur in this group of verbs, at any rate not in Serbo-Croatian, the forms *tōnū, pōtonū* are difficult to understand in this instance too, and it must be assumed that this type is due to the influence of the *i*- and *a*-stems.



acute), as ictus in the prepositional compounds is on the preposition *klē* : *zāklē*; *pē* : *rāzapē*; *dōčē*; *žē*, *zāžē*; *đtē*; *mrīje* : *ūmrīje*; *drīje* : *zādrije*; *zāsū*, etc. Cf. Posavina: *zāklē se*, *rāsū*, *ūmr* besides 1st person singular *zāklē*, 1st person plural *rasūšmo*, 3rd person plural *rasūše* (Ivšić, Rad 197, p. 91).

In the second group there is a difference. While verbs in *-ēti* always have *-(j)e* in the aorist (cf. *zrē*, etc.), we find a contrast in verbs in *-ati*, *-yti*, *-iti*, *-uti*:

On the one hand we find:

<i>biti</i> (hit, beat)	: <i>bīh</i> , <i>bī</i>
<i>gnjiti</i>	: <i>gnjīh</i> , <i>gnjī</i>
<i>čūti</i>	: <i>čūh</i> , <i>čū</i>
<i>krīti</i>	: <i>krīh</i> , <i>krī</i>

and likewise all the verbs in *\*-yti*, except for *byti* and (in dialects) *myti*.

The forms *gnā* (< *gna*), *slā* (< *sala*), *srā* (< *sra*), *sā* (< *sasa*), belong secondarily to the monosyllabic aorists.

On the other hand we find:

<i>biti</i> (be)	: <i>bīh</i> : <i>bī</i>
<i>liti</i>	: <i>līh</i> : <i>lī</i>
<i>piti</i>	: <i>pīh</i> : <i>pī</i>
<i>viti</i>	: <i>vīh</i> : <i>vī</i>
<i>šiti</i>	: <i>šīh</i> : <i>šī</i>
<i>mīti</i>	: <i>mīh</i> : <i>mī</i> (Danničić <i>mī</i> )
<i>dāti</i>	: <i>dāh</i> : <i>dā</i> (Dan. <i>dā</i> )
<i>ōbuti</i>	: <i>ōbuh</i> : <i>ōbū</i> , <i>izū</i> .

The forms *zjā* (< *zja*), *sjā* (< *sja*), *sāzdā* (< *-zda*), *brā* (< *bra*), *prā* (< *p̄ra*), *zvā* (< *zva*), *tkā* (< *tka*) [Dan. *tkā*] belong secondarily to the monosyllabic aorists.

The contrast between these two types recurs in other forms. Present forms with old end-stress, like Slov. *līješ*, *pīješ*, *vīješ*<sup>103</sup>, correspond to aorists of the type *lī*, *pī*, *vī*, while root-stressed ones, like Slov. *bīješ*, *krīješ*, *čūješ*, correspond to aorists of the type *bī*, *krī*, *čū*. Slov. *mīješ*, *šīješ* also have old root-stress, and I assume that in Serbo-Croatian these secondarily broke away from the other verbs in *-yti*. Furthermore, in Slovene the word *gnīješ*, (cf. Russian *гнию*), belongs to the end-stressed type.

The *l*-participle shows the same contrast:

Serbo-Croat. F. *bīla* (hit, beat), *krīla*, *čūla* (= Russ. *бѣла*, *крѣла*, *чула*) as opposed to *prōlio* : *-līla* (Dubrovnik), *pīla*, *vīla* (= Russ. *мѣла*, *чула*).

N. van Wijk, whose *exposé* in RESl. III, p. 36 ff, I have mainly followed, has demonstrated in IF 43, p. 281 ff, that the same

verbs which have circumflex aorist in Serbo-Croatian, have the ending *-to* in the 2nd and 3rd person aorist in Church Slavonic: *pīto*, *-līto*, *-vīto*, *klēto*, *pētō*, *-čētō*, *mrētō* besides *bī*, *kry*, *-žē*, *-trō*. We find the same contrast in the perfect participle passive: *pītō*, *-vītō*, *pētō* : *-bōjenō*, *-krōvenō*, *-trōenō*.

In my book *Das slavische und baltische Verbum*, p. 65, I maintain that aorists in *-to* continue old root-aorists. The explanation of the circumflex is simple where we are dealing with old diphthongs: here the circumflex is just what we should have expected: *mrīje* < *\*mers*, *\*mert*, etc. The circumflex in *lī*, *pī*, *vī* for older *\*lito*, *\*pito*, *\*vito* might be explained as secondary circumflexion owing to the original mobility of the forms. In this way we shall, no doubt, have to explain *bī* (from *byti*) and *dā*, which must be assumed to correspond to proto-Slavonic *\*bystō* and *\*dastō*.<sup>104</sup> In other words the circumflex will have to be explained as in Serbo-Croatian *prēde*, *klāde*, etc., besides *prédēm*, *kládēm*. We are here, as I maintained op. cit. p. 70 ff, face to face, not with *s*-aorists, but with formations with *st* < *dt*: *byd* + *tō* (cf. *bō-d-ō*), imperfect *dad* + *tō* (from the present stem *dad-*). As far as the last-mentioned verb is concerned, I have previously shown that the present had end-stress in Slavonic, but in Indo-European we should expect mobile stress, which in Slavonic would have resulted in circumflex in the root syllable. It is this circumflex we find in aorist *\*dastō* (as opposed to present *\*dastō*), just as in Serbo-Croatian *prēde*, *klāde* besides *prédēm*, *kládēm*. The aor. *bystō* has no present of precisely the same stem-form, but here too we must assume old mobility.

A difficult form to explain is (*ōbuti*): *ōbū* besides the *l*-participle *ōbuo*, *ōbula*, R. *обѣл*, *обѣла*. The present form is *ōbujēm*. These contrasts, however, need hardly be of proto-Slav. origin.

In Serbo-Croatian the aorists of the type: proto-Slavonic consonant + *o*, *u* + consonant + *a*, which have secondarily become monosyllabic forms, show some diversity. On the one hand we have: *sjā* (*ōbasjā*), *zjā*, *sāzdā*, *brā* (*izbrā*), *prā* (*isprā*), *zvā* (*dōzavā*), *tkā* (Dan. *tkā*) and on the other hand *gnā* (*izgna*), *zrā* (*izāsra*), *sā*, *slā* (*pōslā*).

These types must have different origins, and the accentuation of the compound forms suggest that the first type goes back to *\*zōja*, *\*bōra*, *\*zōva*, etc., while the second goes back to *\*sālā*, *\*sārā*, etc.

The accentuation of the aorist runs parallel in Serbo-Croatian with the *l*-participle as far as *brāla*, *zvāla*, *prāla* : *gnāla*, *sāla* (Čak. *sasāla*), *srāla*, *slāla* (cf. Slov. *gnāla*, *slāla*) are concerned. The forms *sjāla*, *sāzdala*, *tkāla*, *zjāla* are exceptions.

It is illuminating to compare the above with the corresponding *l*-participles in Russian. Though this may anticipate what I have to say in a subsequent chapter, I consider that there are grounds for so doing. In Russian we find the following forms:

ждѹ : ждалá	дерѹ : дралá	but: шлю : слáла
тку : ткалá	вру : вралá	стелю : стлáла
лгу : лгалá	жру : жралá	ржу : ржалá
рву : рвалá	попру : попралá	сосу : сосáла
зову : звалá	Old Russ. жену : гналá	
беру : бралá		

As I maintained in my Slav. u. balt. Verbum, p. 78, *e*-verbs have a marginal mobile stress in the participle in *-alo-*, while *je*-verbs have fixed stress on the *-a-* — or we might express it as follows with regard to the above: Verbs which belong to accent-type (b), viz. with early proto-Slavonic fixed stress on the thematic vowel, have a fixed stress on the *-a-*, while the others have marginal mobile stress. I shall deal in greater detail with the *l*-participles in a subsequent chapter.

If we ignore *xjā* : *xjāla*, *sjā* : *sjāla*, which are originally polysyllabic stems in the present (*xjām*, *sjām* — Russ. *зи́ю*, *си́ю*) and Russ. *созáла*, which is also a polysyllabic word, we shall find in Serbo-Croatian the following exceptions to the rule that *e*-verbs in *-ati* have root-stressed aorist and mobile *l*-participle, while *je*-verbs have end-stressed aorist and a fixed stress on the *-a-* in the *l*-participle: *tkā* (and *tkā*): *tkāla*; *gnā* : *gnāla*; *sā* : *sāla*; *sāzdā* : *sāzdala*.

As far as the last-mentioned verb is concerned, there is a contrast between the aorist and the *l*-participle, and there are grounds for assuming that *sāzdā* has been transformed on the pattern of compounds with *dāti*, while *sāzdala* has retained the old stress, the present being an old *je*-stem, Church Slavonic *zīzdo*. In Russian the *l*-participle: *создал*, *создалá* is a transformation on the pattern of *dati*.

As far as *tkā* (*tkā*) : *tkāla*, *sā* : *sāla* are concerned, it should be borne in mind that in the present they have a root-vowel *ə*, while *zvā* : *zvāla*, *brā* : *brāla*, *prā* : *prāla* have presents with a root-vowel *\*e*. In fact, some order seems to emerge from the confusion. Verbs with zero-grade in the root should belong to type (b) (Old Russian *удѹ* : *и́дешь*, *умрѹ* : *и́мрешь*, etc.), just as the *je*-verbs do. The state of affairs in Serbo-Croatian and Slovene therefore suggests that we could formulate the following rule: in proto-Slavonic not only the *je*-verbs, but all verbs of accent-type (b) with a second stem in *a*, have end-stress in the 2nd and 3rd pers. sing. aorist and fixed stress on *a* in the *l*-participle. In Russian mobility in the *l*-participle has been transferred to all hard stems (*ткалá*). The verb *лгу* : *лгалá* also belongs to this category. In older times this verb was a *je*-verb, cf. Church Slavonic *лъгъ*, Bulg. *лъжа*, Serbo-Croatian *lažem*. In Russian *лгалá*

agrees with the present *лгу*. If the present in *-je-* had been retained, we should have expected *\*лгáла*<sup>105</sup>. The accentuation of *gnā*, *gnāla*, (Slov. *gnāla*) is strange. The question arises whether this accentuation points to an older present *\*gñe* : *\*gñeši* (cf. Old Prussian *gunnimai*, *guntwei*), which was subsequently replaced by *ženq*. The present and the infinitive stem do not agree in this verb. We should have expected either *ženq* : *\*žnati* or *\*gñe*, (*\*gonq*) : *gñati*.

### C. The Imperative.

Here it is possible to lay down the clear rule that the ictus fell on the imperative suffix *i-ě* in all verbs which in the present follow the accentual types (b) and (c). In verbs of type (a) the ictus falls on the same syllable as in the present. Cf.

Russ.	White Russ.	S.-Cr.	Slov.
буди́, буди́те	кни́, кнѣ	gñi, gñite	lězi, lězite
пиши́, пиши́те	кажи́, кажи́те	píši, píšite	věži, věžite
ходи́, ходи́те	каси́, касѣте	nòsi, nòsite	prósi, prosite
неси́, неси́те	няси́, нясе́те	plèti, plètite	plèti, plètite
Bulg.	Slovincian		
знай, знай́те	stóji, stójičā		
пиши́, пише́те	kljepji, klepjicā		
носи́, носѣте	mluocā, mlocācā		
неси́, несе́те	pliecā, plecācā		

In verbs of accent-types (a) and (b) the stress of the imperative agrees with the old present stress, which in type (b) preceded the retraction in the present indicative from and including the 2nd person singular. In type (c), the suffix is stressed. The suffix may be assumed to have had an old acute in proto-Slavonic, as ictus is not retracted in the forms where *i-ě* stands in a medial syllable. In Lithuanian the old optative suffix has circumflex, cf. *te-sukiē*, *te-sukỹ*. With regard to the quantity and intonation of the suffix-vowel in the separate Slavonic languages, I have dealt with this subject above (see p. 49).

### D. The present participle active.

In assessing the accentuation of this formation we run up against a number of difficulties, *inter alia* owing to the fact that the participle as such is no longer alive in many Slavonic languages, and has only been preserved in an indeclinable form, as a gerund.

As a general rule, however, it can be laid down that the non-compound (indefinite) form of the present participle active of verbs belonging to

accent-type (a) has stress on the same syllable as the present. Thus we find the gerundial forms, Russ. *плáя* from *плáкaть*, *бúдыи* (cf. *бúды*), etc., Serbo-Croatian *kájúci se*, *víděci*.

As far as verbs of accent-type (c) are concerned, the Russian gerunds show end-stress: *ведя́*, *говоря́*, Old Russian *живу́и* (Ulož. 46b), *трясу́и* (Uč. i chitr. 72a), cf. also Ukrainian *беру́и*, *летя́и* (Укр. *правонис* 1945, p. 100). Corresponding forms in Čakavian (Novi), but with the ictus retracted from the ending, are: *pekúć*, *trěsúć*, *krăđúć*, *želéc* . . In the Serbo-Croatian literary language the stress has clearly been retracted in *pletúci*, *trěsúci*, which have arisen from Štok. *\*pletúci*, *\*trěsúci*. But this in turn suggests proto-Serbo-Croatian *\*pletúci*, *\*trěsúci*, with neo-acute. I find it difficult to explain this retraction from -i. We find the expected form in the *i*-verbs with infinitive in *\*-ěti*: *želěci* < *\*želěci*. The Slovincian gerund *pletóucă*, *pojóucă*, etc., has regular retraction, according to the Slovincian rules.

With regard to Russian *сто́я*, *лѣжа*, *сидя́*, *мо́ля*, etc., and corresponding forms in Slovene, see below.

Things are more complicated when we come to deal with verbs of accent-type (b).

In Russian, *лѣжа́*, *хваля́* show the same suffix-stress as that which must at one time also have been characteristic of the present. If we assume that the participle in verbs of type (a) accented one of the syllables which preceded the suffix, and that in verbs of type (c) it was end-stressed (respectively mobile, see p. 110 f), we should expect in type (b) beside *\*ližę* a stem *\*ližęi-* < *\*ližęi-* and beside *\*xvalę* a stem *\*xvalęi-* < *\*xvalęi-*. Vostokov's remark (Gram., edition 1835, p. 410) that the gerund of recessive verbs (except *мо́згъи*) stressed the root-syllable, agrees with this in the case of Russian: *стѣ́мъи*, *и́щъи*, *тѣ́мъи*, *тѣ́мъи*. We also find agreement in the case of Old Russian *и́щъи* (Uč. i chitr. 30a), *дѣ́ржъи* (ibid. 47a), corresponding to *дѣ́ржсѣ*, while *дѣ́ржъи* (ibid.) belongs to the present *дѣ́ржѣи*, which likewise occurs. Cf. also Russian dialect forms such as: *носѣ́* – *но́сѣи*, *просѣ́* – *про́сѣи* (Kazanskij uj., Sborn. 99, 2, p. 28), and Ukrainian *ка́жъи* (Укр. *правонис* 1945). Čakavian (Novi) *pišúć*, *pálěć*, *žěněć*, and Štokavian *tōnūci*, *đrūci*, *nđsēci* also agree with these Russian forms. In Štokavian, however, in *i*-verbs, *ne*-verbs and in *je*-verbs with a second stem in -a-, we find the rule that the accent is rising and comes on the syllable preceding the suffix, if the root-vowel is long: *pišúci*, *hvalěci*. Here the older stress was on *ū*, *ē*. This rule must be a Štokavian *novum*, introduced from the end-stressed *ie*- and *i*-verbs. Cf. a similar rule in the aorist (page 131).

As we know, type (b) also includes a number of pure *e*-stems: *мо́го* and words with *ъ*, *ь* in the root-syllable. Here we find no confirmation

for our rule. We find here in Old Russian *уду́и* (Uč. i chitr. 47a, etc. Ulož., 4a, 77a, etc.), *бюю́и* (Uč. i chitr. 204a, cf. Vostokov l. c.), *мо́згъи* (Uč. i chitr. 28a, cf. Vostokov). Cf. Ukrainian *жоду́и*, *н'юю́и* (Borščak, Lectures Ukr. 1946 p. 31, 33). Štokavian *mrúci* (< *\*mrúci*), *trúci*, *zrúci*, *prúci*, *vrúci* agrees with this, while the *je*-verbs *žěti*, *slāti* have *žnjúci*, *šljúci* (< *\*žnjúci*, *\*šljúci*). Furthermore we find *mōgūci*, *īdūci*, though the adjectival form is *mōgūć*, *mōgūća*, *mōgūće*<sup>106</sup>.

The question arises whether in the type Serbo-Croat. *mrúci*, Russ. *уду́и*, we are dealing with an old inheritance. In Sanskrit, besides *tudánti*, we also find the form *tudatī* in the feminine of *tudán*. If we except the ablaut grade in the suffix, this agrees with Old Russian *уду́и*, *бюю́и*, Serbo-Croatian *mrúci*, *trúci*, etc. Endzelin states in KZ, LI, p. 12; «Man muss daher wohl annehmen, meine ich, dass z.B. die ursprüngliche slav.-balt. Form des Nom. sg. F. nicht dem ai. *tudánti*, sondern der ai. Nebenform *tudatī* entsprach (also z.B. lit. *\*sukinti*, gen. *\*sukinčiōs*).»

The verb *мо́го* has also joined this type, although the reason for this is not clear.

There still remains a set of peculiar forms for us to deal with.

In Russian we find a few root-stressed gerunds in -я in verbs which have no fixed root-stress, but belong to type (c) [rarely (b)]: *сто́я*, *лѣжа*, *сидя́*, *хóдя* (*пóходя*), *мо́ля*, *гля́дя*, *нѣхотя́*.

These forms are old in Russian, and are to be found in old accented texts, e.g. Čudov NT: *и́щя* 119b, *хóтя* 116b, *сто́я* 69b, *и́я* 45a; *бо́ля* 132a, *постя́ся* 65b < *\*бóля-ся*, etc., cf. p. 102 f. Further in Uč. i chitr.: *лѣжа* 109b (besides *лѣжá* 223), *сидя́* 151a, *сто́я* 6a, 51b, etc. (besides *стѣ́я* 47b, 209a). Slovene *gledę*, *sedę*, *ležę*, *stoję*, *želę*, *molčę*, *gredę*, *klečę*, *тъžę* (< *\*ględe*, etc., cf. Valjavec, Rad. 132 p. 207; Breznik, Slov. n. p. 142) correspond to this Russ. type. Cf. also Čak. (Novi) *něhote* («unexpected, incidental») and Štok. *hōte*, *něhote*, *mūće* (Rešetar, R. E. Sl. XVII p. 53 f).

The bulk of these verbs are verbs with an *i*-present of type (c), and with an infinitive in -ěti (or with an -ati developed therefrom). Slovene *podę* (Valjavec) has an infinitive in -iti of type (c); but according to information I have obtained from Slovene scholars in Ljubljana (1954), the form *podę* is unknown to them. Slov. *gredę* belongs to an *e*-verb: Church Slavonic *grędę*, cf. Slov. *grędem* beside *gręm*, Serbo-Croatian *grędęm*, Russian *грѣ́дъ*, Bulg. *грѣ́дá* of type (c). The word *gledę* beside *ględati*, -am is not clear. It would appear to belong to *\*ględęti* cf. Russ. *глядѣть*. The verb *хотѣть*, as far as its *i*-forms are concerned, belongs to type (c): *хотѣи*, and secondarily *хотѣи*, *хотѣи*. Russ. *хóдя* is an exception, but it is possible that this verb is a later addition to our group, due to the influence of the verbs *сто́я* and *сидя́*.

This suggests that in verbs of type (c), at any rate in *i*-verbs with an infinitive in *-ěti*, there existed side by side for example Old Russian *сто́я* and *сто́яи*, in other words a mobile flexion. This makes it possible to reconstruct the proto-Slavonic forms *\*stǫję : \*stojęi, \*sěde : sědeři*,<sup>107</sup> etc.

This supports the idea that these verbs, too, of type (c) were once mobile at a proto-Slavonic stage: *\*lěžǫ, \*lěžiši : \*ležiǫ/-mǫ, \*ležitě*, cf. page 110. In the *e*-verbs mobility in the participle seems to have disappeared, being superseded by end-stress when the present became end-stressed.

But here we run up against a strange fact: in a mobile paradigm we should have expected end-stress in the nom. sing. M., viz. *\*ležę*. In Slavonic the nom. sing. in the mobile paradigm is apparently an end-stressed case, cf. *\*golvǫ* (Lith. *galvǫ*), although it is more difficult to prove this in other stem-types. The question arises whether this stress in the nom. sing. applied in all mobile declensions. If we do not accept the possibility of a root-stress in the masculine, it is possible to explain the stress as originating in the neuter. Mobile neuters had root-stress in the nominative and accusative singular in Slavonic, cf. Russ. *пóле*, *нѣбо* (palate), *нѣбо* (heaven), *врѣмя*, Serbo-Croatian *prǎse*<sup>108</sup>.

As far as the composite (definite) forms are concerned, there is little material available, because the participles have largely gone out of use. In the languages where «long» adjectival forms of the present participle are used, the stress has apparently to a large extent been normalized.

In Russian the form is frequently used in the literary language, but unlike the gerund it is mostly of Church Slavonic origin. Consequently it provides no sure basis for assessing the older Russian stress. Nevertheless I shall deal with the Russian forms in connection with the «long» forms of the present participle active in the other languages where a difference of accent has been preserved. Once again I shall take my *point de départ* in the stress of the present tense.

1. Accent-type (a). Here, as we would expect, the ictus in Russian is on the first syllable: *бѣдѹи́и*. Slovincian *jezǫuci, lezǫuci* are almost certainly analogical.

2. Accent-type (c). In the «long» form of the end-stressed or mobile participle we expect retraction to *-ǫ*-, *-ę*- with neo-acute in a majority of the forms, viz. gen. *\*vedǫtǫjago > \*vedǫtǫgo > \*vedǫtǫgo*, respectively *\*vǫdǫtǫjago > \*vǫdǫtǫjago* and furthermore the same development. This accentuation — which corresponds to the one we find in Russian *бѣлѹи́и*, (*вѣсѣлѹи́и*), Čak. *bělǫ (okruglǫ)* — is to be found in Russian *ведѹи́и*, *сто́яи́и*, *гостѹи́и* and in the genuine Russian adjectives *сто́яи́и* (*сто́яи́я вода́*), *гостѹи́и*; cf. Slovincian *pleǫuci, rekǫuci*. Polish *wiodǫcy, siedzǫcy*, Czech. *nesoucí, trpící* with a long vowel representing the neo-acute, may agree with this.

3. Accent-type (b). From a «short» form with recessive accent *\*pišǫi*-, *\*l'ubeǫi*-, *\*nosǫi*- we should expect a composite form with the same accent: In Russian we regularly find *пи́шущи́и*, *ко́лющи́и*, etc. Slovincian *klepǫuci, mlouǫuci* can undoubtedly be attributed to analogical spread of the accent on the penultimate syllable.

We find some vacillation in Russian in verbs in *-iti*-. Frequently we find suffix-stress: *водѹи́и*, *просѹи́и*, *носѹи́и*, etc., i.e. as in the case of verbs of accent-type (c). On the other hand we find a number of verbs with recessive accent: *ру́бящи́и*, *да́вящи́и*, *лю́бящи́и*, *слу́жащи́и*, etc. Several similar cases occur in Russian-Church Slavonic from the oldest times in which we know of accented texts. Examples: *лю́бящи́и* Ostrog. Bible, Matt. 5; Karion, 17th century, RFV 14, p. 12, *хва́лящи́и* Korm. 1650, 211a. These also have root-stress in the short form containing the syllable *-ищ-* (including the gerundial form in *-ище*): *хва́лящесѧ* (Kormčaja 1650 211b), *кѹнѹище* (ibid. 292b), *лю́бяще* (ibid. 126a); cf. also *пѧлящи* (Ups. Ksl. Fol. 45-1607). This disagreement in the *i*-verbs of accent-type (b) I find difficult to explain.

In verbs of accent-type (b) with end-stress in the non-composite form of the participle we expect — and find — the same stress in the composite form as in verbs of type (c). R. *идѹи́и*, *могѹи́и*, Posavina *idūci* beside gerund *idūc* (but we also find *budūci*). [Ivšić, Rad. 197, p. 105].

### E. The *l*-participle.

This is a complicated chapter, as the stress of the *l*-participle is linked up partly with the infinitive, partly with the present, and partly with the aorist.

1. If we consider the pure *e*-verbs with monosyllabic infinitive stem ending in a consonant (but not in a nasal or a liquid), we shall find that the *l*-participle is root-stressed and acute in cases where the infinitive is root-stressed, but end-stressed (with neo-acute vowel in the masculine), where the infinitive is end-stressed.

α. Russ. *лез*, *лѣзла*, *лѣзло* beside *лезть* (present *лѣзу*); *нал*, *нѧла*, *нѧло* beside *насть* (*nadǫ*); Čak. (Novi) *krǫl*, *krǫla* beside *krǫst* (present *krǫden*), (Brusje): *strić*, *striǫa(l)*, (present *strižęn*)<sup>109</sup>.

β. Russ. *нѣс*, *несла́*, *несло́*, *неслѹ* beside *нести́* (*несѹ*, *несѣишѹ*), Čak. *pěkal*, *peklǫ*, *peklǫ*, *peklǫ*, beside *pěc*; *trěsǫl*, *trěslǫ*, beside *trěst* (*trěsęn*, *trěšęš*), Slov. *plětęl*, *plětęla*, *plětęlo*, Russ. *мог*, *могла́*, *могло́*, *моглѹ* beside *могъ* (*могѹ*, *можеишѹ*), Čak. *potǫgǫl*, *-moglǫ* (Štok. *moći*).

2. In verbs with monosyllabic infinitive stems in *-ěti*-, *-yti* (apart from *byti*) and *-iti* < *\*iūti* we find root-stress. Russ. *с.мел*, *с.мѣла* beside *с.мѣть*



(с мѣю); *крыл, крыла*, beside *крыть* (крью); *шил, шила* beside *шить* (шью); Serbo-Croatian *smlo, smjela* beside *smjēti*; *krlo, krila* beside *krīti*, *šio, šila* beside *šiti*; Slov. *grēl, grēla*; *pokril, pokrila*.

3. As to the other monosyllabic infinitive stems ending in a vowel, or ending in a nasal and liquid, the stress of the *l*-participle is dependent on the 2nd and 3rd p. sg. aorist.

α. If the aorist has acute, the *l*-participle has root-stress and acute: Serbo-Croat. *bio, bila* beside *bīti* («to beat»), aorist *bī*; *žeo, žela* beside *žēti* (*žnjem*), aorist *žē*; *znāo, znala* beside *znāti*, aorist *znā*; *třo, třla* beside *třti*, aorist *tř*; *nāduo, nādula* beside *nāduti*, aorist *dū*. Russian *бѣла, знала, ждала, тѣрла, дѣла* agree with this.

β. If the aorist has circumflex, the *l*-participle is mobile. Russ. *дал, далá, дало, дали*; *прóдал, продалá, прóдало, продали*; Čak. *dāl, dālā, dālo, dāli*; aorist *dā* (Štok.); *prodāl, prodālā, prodālo*. Russ. *нул, нулá, нуло, нули*; Čak. *pīli*; *pōpīl, popīlā*; aorist *pī* (Štok.); Russ. *взял, взялá, взяло, взяли*, Čak. *zēl, zēlā, zēli*; aorist *ōtē* (Štok.); Russian *умер, умерлá, умерло, умерли*, Čak. *ūmrl, umrlā, umrlo, umrli*; aorist *mrije* (Štok.); Russ. *нагал, нагалá* cf. Štok. aorist *dōčē*; Russ. *был, былá, было, были*, cf. Čak. *dōbīl, dobīlā*; aorist *bī* (Štok.).

As the words in *-ēti* and *-yti* (apart from *byti*) have an acute vowel in the aorist, subsection 2 and subsection 3 can be taken together. We can say that in monosyllabic infinitive stems ending in a vowel, the stress of the *l*-participle agrees with that of the aorist.

If we assume that in the case of polysyllabic infinitive stems in *-ēti, -nōti, -ati, -iti*, the 2nd and 3rd person singular aorist had the stress on a syllable preceding the suffix where the present has this stress, end-stress if the present belonged to the recessive type (see page 130 f), and stress on the first syllable (except in the verbs in *-ēti*) if the present was marginally end-stressed (type (c));<sup>110</sup> then here too we can establish a relationship between the stress of the aorist and that of the *l*-participle. The relationship to the infinitive and present is, however, clearer. Here, the following observations may be made:

1. Verbs with an infinitive in *-ēti* have root-stress in the *l*-participle if the infinitive has root-stress, suffix-stress — like the aorist — if the infinitive stresses the *ē*: Russian *видеть* : *видел, видела*; *судеть* : *судел, судела*; Slov. *vidēl, vidēla*; *sedēl, sedēla*.

2. Verbs with an infinitive in *-nōti* have root-stress in the *l*-participle if the infinitive has root-stress, otherwise stress on *-nō-*. This agrees with the fact that the present of verbs in *nō-* apparently only had two accentual types — (a) and (b) — in proto-Slavonic. With accent-type (c) we should have expected mobile stress of the *l*-participle, see above p. 135 f.

Russ. *гнѹть* : *гнѹл, гнѹла*; *тянѹть* : *тянѹл, тянѹла*; *стрѣльнѹть*, *стрѣльнѹл, стрѣльнѹла*, Serbo-Croat. *gīnuti* : *gīnuo, gīnula* (Čak. *Novi gīnūl, gīnūla*); *tōnuti* : *tōnuo, tōnula* (Čak. *nagnūl, nagnūla*).

3. Verbs with an infinitive in *-iti* can belong to all three accentual types in the present.

a. Root-stressed *l*-participle belongs to the root-stressed present: Russ. *-бáуть*; *-бáул, -бáула*, cf. Serbo-Croatian *gāziti* : *gāzio, gāzila*; Slov. *glāditi* : *glādil glādilo*.

b. If the present belongs to the recessive type, the *l*-participle has stress on the *i* in all forms: Russ. *ходѹл, ходѹла, ходѹло*; Čak. *pālil, pālila* beside present *pālīn*; *ženil, ženila* beside *žēnīn*; Slovene *hódil, hodila, hódilo*.

c. If the present belongs to the marginally end-stressed type (c), we regularly find in modern Russian the same stress as under (b): *гостѹл, гостѹла, гостѹло, гостѹли*. A form such as *родулá* shows, however, that this rule is not absolute, and if we consider South Slavonic we are led to formulate the rule that the old participle in these verbs regularly had marginal mobile stress.

In Slovene, in verbs of this group we find the type *gostil, gostila, gostilo*, which goes directly back to *\*gōstīl, \*gōstīlā, \*gōstīlo*; we find *podil* < *\*pōdīl* but *zapōdil* < *\*zāpōdīl*, cf. furthermore *lovil, lovilo* < *\*lōvīl, lōvīlo*, but *rodila* < *\*rodīlā* (= Russ. *родулá*). In Čakavian (Novi) we find *rōdīl, rodīlā, rōdīlo*.

Russian-Church Slavonic *пóложилъ* (Triod' 1621, 31a) *утилá* (ibid. 487a), *родулá* (ibid. 1b, 49b, etc.), *оулови́лъ* (ibid. 490b), *вло́жилъ* (ibid. 127b), *покорилá* (ibid. 131b), *сбóргъшилъ* (ibid. 142b), *явилъ* (ibid. 480a); *пóлутилъ* (Čet.-Min. Makarija 1554, Busl. 774) agree with this. Cf. Čudov NT: *створилá* 14b, *предварилá* 23b, *створилъ* 75b, *несогрѣшилá* 111a, *посмрадилá* 157a. Russian dialects, too, show more traces than the literary language: *пýстил, пустилá, прóстил, пóложил* (Vladimirskaja Gub., Muromskij Uj., Sborn. 99, 3, p. 10), *распустилá, спустилá* beside *впустили*, *допустили* (Terskaja obl., Karaulov, Sborn. 71, 7, p. 35), *прóстилъ* (Vladimirskij uj., Černyšev, Sborn. 71, 5, p. 30), *рóстил(у), пýстили* (Suzdal'skij uj., ibid. p. 18, 25).

4. It is my belief that verbs in *-ati* had originally precisely the same stress in the *l*-participle as verbs in *-iti*.

a. α. Verbs with an infinitive in unstressed *-ati* have the same stress in the *l*-participle as the infinitive. This applies not only to verbs with a 2nd stem in *-a-*, but also to verbs in *-aję* (whether they show contraction in the present tense in the separate languages or not). Russ. *плáкал, плáкала*; *дѣлал, дѣлала*, Serbo-Croat. *kājati se, kājala se*; Slov. *dělal, dělalo*.

β. Verbs in stressed *-ati* and present in *-āje* have fixed stress on *-a-*

in the *l*-participle (whether they show contraction in the separate languages or not):

Russ. *umátъ, umáю* : *umála*; Serbo-Croat. *pítati, pítam* : *pítao, pítala*; Čak. *kopāt, kopān* : *kopāl, kopāla, kopālo*; *pītāt, pītān* : *pītāl, pītāla*; Slov. *stopāti, stopam* : *stópal, stopāla*; *končāti, končām, končāl, končāla, končālo*.

b. In the case of verbs with present in *-je-* or *-e-* and retraction from and including the 2nd person singular (type (b)), we find fixed stress on *-a-* in the *l*-participle, as in section (aβ). Examples: Russ. *nucál, nucála*; *skazál, сказála*, etc.; Čak. *pīsāt, pišēn* : *pīsāl, pišāla*; Slovene *česal, česāla, česālo*. To this category belong a number of words which have acquired a monosyllabic stem in the separate languages; Russ. *слал, слāla, слālo* (present: *илю*); Čak. *slāt, šljēn* : *poslāl, poslāla*; Slov. *slāl, slāla, slālo*; Čak. *tkāl, tkāla, tkālo*. Russ. dial. *пognāl, послāl* (but *пóзвал, сóбрал*) [Muromskij uj. Sborn. 99, 3, 10].

c. In verbs with stressed thematic vowel (type (c)) we have in modern Russian the same stress of the *l*-participle as in verbs of type (b): *ковātъ, кую, куюшь* : *ковāl, коvāla, коvālo*. This accentuation, however, is hardly old. In Slovene we find *kovāl, kovāla, kovālo*, which quite clearly goes back to *\*kōvālъ, \*kovālā, \*kōvālo*. To this type belong *kovāl, orāl, jemāl, dajāl, kljēvāl, majāl, rvāl, sejāl, sijāl, smejāl, snovāl, svāl, ščevāl, trovāl, bljēvāl*, according to Valjavec, Rad. 132, p. 206, cf. present *kújem, kljújem, pljújem, sméjem se, dájem* (besides *dajēm*), *órjem, jémľjem, májem, rújem, síjem, snújem, ščújem, trújem, bljújem*, etc. With old root-stress we would have had *\*kújem*, etc. (Exceptions are *sějem, síjem*). Russian has *кую, куюшь, ореишь* besides *ореишь* (ploughs), *даеишь, клюеишь, рвеишь, смеишься, снуеишь, блюеишь*. To this group also belong Slov. *brāl, brāla, brālo*, etc., Russian *брал, бралā, брālo, брāли*; *звал, звāla, звālo, звāли*; *драл, дралā, etc.*, Čak. *prāl, prālā, prālo*; *zvāl, zvālā*. These are the modern representatives of *\*zōvālъ, \*zvālā, zōvālo*; *\*bōrālъ, \*brālā, \*bōrālo*, etc. Proof that this accentuation was not unknown to the polysyllabic stems in Russian either, is shown by Russ. dial. (Tverskoj uj., Černyšev, Sborn. 75, 2, 8): *ковālā, проковālā, коvāли*; Old Russ. *нѣи малъ* (Uloženje 88b, 238b)<sup>111</sup>.

If the verbs are compounded with a preposition, the stress of the first syllable comes on the preposition: Čak. *òprāl, oprālā; pòbrālo, pobrālā*, Mod. Russ. (*зостѣи*) *сóзвал; егó зāбрало*, Old Russ. *пáзорвало* (Uč. i chitr. 45a).

It is strange that words in *\*-újo, \*-ovāti* should belong to this group in Štokavian. In Russian we have *даровātъ, дарýю* : *даровāl, -āla* and in Slovene, as we should expect, *kupovāti, kupújem* : *kupovāl, -āla, -ālo*; Slovencian has *darúovēul, darōvā*. In Čakavian (Novi), however, we find for *kupovāt, kupújēn* : *kūpovāl*, besides *kupovāla, -ālo*, and in Štokavian

*kūpovao*. This form must be taken to be an innovation on the pattern of the aorist *kūpovā*, which may be archaic.

#### F. The perfect participle active.

As far as this participle is concerned I shall confine my remarks to the nom. sing. masc., and omit here the other forms for lack of reliable material.

It appears from the old Russian texts that in the nom. sing. masc. the stress was retracted to a preceding preverb or negation if the *l*-participle of the verb in question was mobile, i. e. that the perfect participle active in *-š-* was mobile in the same instances as the *l*-participle.

Cf. the following examples: the Čudov NT: *вспомняиуъ* 140a (cf. *помянется*, Kormčaja 1650 100a), *отпустився* (< *\*отпустивъ ся*) 162a, *созвавъ* 163b, *нагнъ* 66a, *прѣдавъ* 66b, *створиъ* 79b, *неположиъ* 37b — but: *писавъ* 142a, *связавъ* 74a. Chronograf: *прѣдав* 39, *прѣбыв* 77, etc., *собрав* 104, *пóжив* 112. Triod' 1621: *создавъ* 127, *собравъ* 25a. Uč. i chitr. *прѣдавъ* 20a but *прѣшедъ* 61a, etc.

#### G. The perfect participle passive.

We shall now consider the perfect participle passive in *-eno-*, *-no-* and *-to-*. The most practicable approach is to deal first of all with the suffixes containing *n*.

##### 1. Verbs with the infinitive stem ending in a consonant.

a. Thematic and athematic verbs with the infinitive stem ending in a consonant have the suffix *-eno-* and root-stress if the infinitive has (acute) root-stress: Russ. *зрызен, -ена, -ено* beside *зрызь* (pres. *зрызý*), Serbo-Croat. *prēden, prēdena, prēdeno* beside *prēsti (prēdēm)*, Russ. *сѣчен: сѣть (сѣкý)*, Serbo-Croat. *sjěčen, sjěčena* : *sjěci (sjěčēm)*. In the same class comes the athematic verb S.-Cr. *jěden, jědena* : *jěsti (ijēm)*, Russ. *сѣден, сѣдена* beside *есть (е.м)*. In other words, the state of affairs we find here is exactly the same as in the case of the *l*-participle.

b. Thematic verbs with end-stressed infinitive and (marginal) end-stress in the present have end-stress in the perfect participle passive, i. e. proto-Slavonic *\*-ēnъ* (< *\*-enō*), *\*-enā, \*-enō, \*-enì*: Russ. *несѣн (несѣиъ)*: *несѣн, несенā, несенō*. From Russian-Church Slavonic I have taken the following examples of non-nominative forms: *преведену ему бывшу* (Chron. 35); *рыбы пеленъ расъ* (the Bible 1663, Luke 24). Corresponding with this we have in Čak. (Novi) *pěc (pečēs)* : *pečēn, pečenā, pečenō*; *trést (trēsēs)* : *trēsēn, -enā*. Stok. *trēsen, trēsena, tréseno* are almost certainly the result of a secondary development, as in the case of the retraction in the present indicative (page 119). Slovene *pletēn, pletēna, -ēno* agrees with Russian and Serbo-Croatian.

Note. In Russian-Church Slavonic texts we often find the stress *-énъ, -éна, -éно*. As the perfect participle passive must be assumed to have been a living form in Russian, as well as being Church Slavonic, I suppose that at the time when the Russian-Church Slavonic accentuation was moulded, this stress already existed in the Russian dialects which formed its basis. This accentuation occurs in dialects even to-day: *приведён, -ёна; привезён, -ёна* (Muromskij uj., Vlad. Gub.), *принесён, -ёна; полуён, возвращён, приведён* (Medynskij uj. Kal. Gub.) [Sborn. 99, 3, 10, 38], *приведёна, принесёна, принесёно, исключёны* (Kašin, cf. Smirnov, Sborn. 77, 9, p. 140.); cf., however, what is said below (p. 148) on R.-Ch. Slav. participles in *-án-*.

c. In thematic verbs with recessive present stress (type (b)), the question of the stress of the perfect participle passive is not quite clear, as most of these verbs in Russian either have got secondarily a different participle formation (in *-t-*), or, owing to their meaning, do not lend themselves so easily to this form. The accentuation *пройден, пройдена, пройдено* is listed by Ušakov as «разг.» as opposed to *пройдён, -енá, -енó*; the accentuation *найден, найдена, найдено*, *-енá, -енó* are designated «устар.» in contrast to *найден, найдена, найдено*, with a mobile stress that we should not have expected in this type of participle. In Čak. (Novi) we find beside *mlit (mëljen)* perfect participle passive *samëljen, samëljena*. cf. 1a. Rešetar (RESI. XVII, p. 65) accepts the form *(pò)moženo*, and not *(po)moženo*. The forms here quoted would suggest that these verbs in proto-Slavonic had neo-acute intonation of the syllable preceding the *-en-*. In proto-Slavonic it must therefore be assumed that *-en-* was originally stressed, and that this *\*-èn-*, either under the influence of *\*-ân-* (metatonic form of *\*-ân-*, see below), has acquired a falling stress (*\*-èn-*) and in this way yielded its ictus to the preceding syllable, or else, by pure analogy with the type *\*pisānъ, \*pisāna*, etc., had its ictus retracted, thus preserving unity within the accent-type (b). Cf. the corresponding alternative suggestions for the recessive present in the thematic verbs, p. 116 ff.

## 2. Verbs with the infinitive stem ending in a vowel.

In verbs with a monosyllabic infinitive stem ending in a vowel, Serbo-Croatian shows end-stress in *čiti (čijēm)*: *čūven, čuvēna; bitī : bijen, bijēna* and *bjena; šiti : švēna; trīti : trēna*<sup>112</sup>. Čakavian (Novi) has *tārēn, tārēna* (cf. pres. *tārēn*) from *třt, svijēn, svijēnā* from *-vīt*. These forms are not found in Russian, which has a participle in *-t-*.

We shall now consider verbs with polysyllabic infinitives in *-ěti, -ati, -iti*.

1. In verbs in *-ěti* the accentuation of this participle is not quite clear, as most of these verbs owing to their meaning do not readily form it.

Furthermore, in certain cases the influence of verbs in *-iti* may have made itself felt.

The root-stress in Slov. *vīden, -ena, -eno* is clear. In verbs with stressed *-ěti* the Russian *вѣлено* (for example Domostroj 57, Ulož. 115a, *вѣльно* ibid. 173a) beside *велѣтъ* might suggest retraction as in the case of verbs in *-ati*.

## 2. Verbs with infinitive in *-ati*.

a. In verbs with the ictus on a syllable preceding *-ati*, this stress is retained in the participle: Russ. *сдѣлать, сдѣлан*, Serbo-Croat. *glědati : glědān, -āna*.

b. In verbs with retraction from and including the 2nd person singular we find retraction from *-a-* in the perfect participle passive. The new stressed syllable receives a neo-acute. Cf. Čak. (Novi) *pīsāt, pišeš : pišān, pišāna*, Russ. *нucāmъ, нuиуемъ : нucанa*. In verbs in *-aję* we find the same: Čak. *pītāt, pītān : pītān, -āna; kopāt, kopān : kōpān*, Russ. *терѣтъ, терѣю : помѣрян*.

The retraction mentioned in (a) and (b) must be considered as due to a proto-Slavonic circumflexion of the *-a-* in the suffix *-ano-*, whose causes are not known to us.

That Serbo-Croatian verbs with a short root-vowel withdraw their ictus to a preposition is undoubtedly due to influence of the next type (c).

In Slovene we find suffix-stress in the same verbs as those which have it in the present: *končati, končam : končān*. This type has been joined by short-vowel *je*-verbs with recessive accent in the present, cf. *počesām*. As verbs of the type *končām* have ictus on *-a-* in all other forms, end-stress in the perfect participle passive *končān* will probably have to be explained as due to levelling.

c. In verbs with present tense having the accent-type (c) the *n*-participle — like the *l*-participle — was mobile. This is proved by forms such as Čak. (Novi) *skōvāno : skovānā; nābrān, nabrānā (nabrānā analogical), pōzvān : pozvānā (pōzvāna secondary); đrān : orānā : đrāno*<sup>113</sup>. These forms point back to proto-Slavonic *\*kōvānъ, \*kovānā : kōvāno; \*břrānъ, \*břrānā : \*břrāno; \*pōzvānъ : \*pozvānā*, etc. In Russian, forms such as *сбран, собрана, собрано; назван; названá, названо* belong to this type. (*прóдан, -данá, прóдано* have the same stress, while *дан, данá, данó* show end-stress.)<sup>114</sup> More traces of this stress is to be found in older Russian, cf. *розорваны* 220b (beside *розорваны* 163b) [Uč. i chitr.]; *основаны* (ibid. 14a) is almost certainly derived from a paradigm, *\*ōсновāнъ : \*ōсновāná*, cf. *основанá* in Uvět. duchovn., Moscow 1632, Busl. 1248; the Bible 1663, Matt. 7.

It is these three cases: (1) constant root-stress in verbs of the type *дѣлать* (2) one-step retraction with neo-acute in the types *нucāmъ*

and *узрѣтъ*, and (3) mobility in the type *собрѣтъ*, that together produce the rule that *-an-* is incapable of carrying the stress.

Note 1. The stress on the first syllable in Serbo-Croatian *kŭpovān*, *kŭpovāna* agrees with the equally irregular «mobile» stress of the *l*-participle: *kŭpovao* (see above 144 f). Both instances are probably due to the aorist *kŭpovā*, etc. (see *ibid.*).

Note 2. The instances occurring in Russian-Church Slavonic where *-an-* is stressed must be Church Slavonic (i.e. not Russian). It is characteristic that to a large extent these comprise compounds in *из-*, frequently deriving from Church Slavonic (as opposed to Russian *вы-*), and also other purely Church Slavonic elements: the Bible, 1663: *избрѣнъ* (Rom. 1), *испрѣно* (Apos. 14), *изгнѣнъ* (John 12), *исткѣнъ* (John 19), *познѣнъ* (the Acts 7), *воспитѣнъ* (the Acts 7), *препитѣна* (Apos. 12), *обладѣнъ* (First Corinthians 6), but *собрѣни* (John 20, Acts 4).

3a. In verbs with infinitive in *-iti* the rule applies that those verbs which constantly stress the syllable preceding *-iti* retain this stress in the perfect participle passive. Cf. Russian *прѣбавѣтъ*, *прѣбавленъ*, Serbo-Croatian *gāziti*, *gāžen*, Slov. *misliti*, *mislím* : *mísljen*.

b. In verbs with a recessive accent from and including the 2nd person singular present we find in Serbo-Croatian the same retraction also in the perfect participle passive: Serbo-Croat. *hváliti*, *hválím* : *hváljen*, *hváljena*; *nòsiti*, *nòsím* : *nòšen*, *nòšena*, Čak. (Novi) *pāliti*, *pālím* : *páljen*, *páljena*; *ženiti*, *žēnīm* : *žēnēn*, pl. *žēnēni*. In Russian, too, the accent agrees in most cases with the present: *спросѣнъ* from *спросѣтъ* : *спрошѣу*, *спросѣшишь*; *истопленъ* (besides *устопленъ*), *разбуженъ* (Church Slavonic *-жидѣнъ*), *возлюбленъ*, *похваленъ*, *полученъ*, *накормленъ*, *купленъ*. As to the explanation of this retraction, cf. above, p. 146. Some of the exceptions are Church Slavonic forms. Others can be explained by the fact that a great many words which today are accented according to the recessive type (b), formerly conformed to (c): *разделѣнъ* from *разделѣтъ* (*-дѣлишиъ*, older *-дѣлишиъ*).

c. The marginally end-stressed *i*-verbs in Russian have in the perfect participle passive marginal end-stress like the corresponding *e*-verbs: *гощѣу*, *гостѣишиъ* : *угощѣнъ*, *-енѣ*; *мѣю*, *мѣишиъ* : *утаѣнъ*, *енѣ*. In Serbo-Croatian, however, we find the perfect participle *lōmljen*, from *lōmiti*, (*lōmīm*), and similarly *prēlōmljen*. Likewise from *svjedōčiti*, (*svjedōčīm*) we find *svjedōčen*, *-ena*. In Čak. (Novi), from *roditi*, *rōditi*, *rodilā* we find in the perfect participle passive *rōjēn* and *rojēn*, plural *rojēni*. It is probably the last-mentioned form which represents the original, when we compare it with the state of affairs in Russian. Leskien (Gr. § 900) regards the retraction in Štokavian as deriving from prepositional compounds which of necessity occur with great frequency in the perfect participle passive: here, retraction in

Serbo-Croatian takes place also in the present: from *slōmiti* we have *slōmīm*, and accordingly *slōmljen* (Gr. § 834, 2b). It is reasonable to suppose that this is the basis for this deviation from Russian.

Slovene has — sometimes with a secondary change in the end consonant of the root-syllable — from type (a) *mísljen*, from (b) *zmōšten*, from (c) (*poditi*;) *zapodēn*, *-ēna*, *-ēno*.

The other passive participle formation in the past is the one in *\*-to-*. This occurs in Church Slavonic after a nasal, but otherwise only in a few words ending in *-tā* in the 2nd and 3rd person singular aorist (with regard to this, see page 134 f). In the separate languages this formation has had a tendency to spread. Thus in Russian, beside *развѣтъ* we also have *убѣтъ* (Church Slavonic *bijena*); Serbo-Croatian *prōžnāt*, *gnāt* (beside *gnān*), etc.

The participles which have the suffix *\*-to-* have circumflex in Serbo-Croatian in monosyllabic words. In compounds the stress is on the prefix. This formation was originally mobile. Thus Serbo-Croatian has *klēt*, *ōtēt*, *nāčēt*; *žēt* (*žēmēn*), *zāpēt*, *prōdrt*, *lit*, *pīt*, *vīt*. Čak. (Novi) *pōčēto* : *pōčētā*, *zāpēto* : *zāpētā*. The *\*-to*-participles, which belong to verbs with an acute vowel in the aorist and which have replaced the older participles in *-en-*, also get a circumflex: *pōžēt* (from *žnjēm*), *nādūt* (*-dmēm*), *krīt*, *mīt*, *šīt*, *pōznāt*, *klāt* (from *klāti*), beside *klān* (Čak. *kōljen*, Church Slavonic *kol'ēnā*), *bīt* (from *bīti*, «beat», Church Slavonic *bijēnā*), *dāt*, *pōznāt*. An exception is *tīt* beside *trēn*.

We find a corresponding state of affairs in Russian: *нанятъ*, *нанятѣ*, *нанято*, *наняты*; *нагатъ*, *нагатѣ*; *прōжитъ*, *прōжитѣ*; *прōклятъ*, *прōклятѣ*; *прōлитъ* : *прōлитѣ*, etc.

The forms *nōpot*, *kōlot*, *mōlot*, which admittedly have the same place of ictus in the feminine (*nōpota*, etc.) and no transfer of stress to the preposition (*pacnōpot*), show that here, too, the secondary *t*-formations receive a circumflex.

To the nasal stems also belong the verbs in *-nōti*. In Serbo-Croatian the ictus always falls on the syllable before *-nūt*:

a. *dīgnuti*, *dīgnēm* : *dīgnūt*.

b. *krēnuti*, *krēnēm* : *krēnūt*.

In compounds the old stress comes on the root-syllable: *pōdignūt*, *ōkrēnūt*, *ōtaknūt*. This shows that the vowel of the root-syllable in verbs of type (b) was neo-acute in these participles, as opposed to the type *ōtēt*, etc., which was mobile. Posavina (*o*)*krēnūt* (Ivšić, Rad 197, p. 103) confirms this. The type Serbo-Croatian *\*krēnūt* may be due to the influence of the perfect participle passive in the other verbs with a present of accent-type (b), or it may be due to a purely phonetic retraction from a circumflex *-nōt-* with the same metatony as in *\*-ān-* (cf. infinitive *-nōti*), respectively

from a Serbo-Croatian *-nūt-* with a circumflex as in *krīt, klāt*, etc. I believe, however, that it is necessary to choose between the first and the third possibility, as proto-Slavonic can hardly have had any perfect participle passive in *-npt̃*, since Church Slavonic only has *-eñ* (*divižeñ*) and *-noveñ* (*rinoveñ*).

It is thus possible to state a clear parallelism between the *l*-participle and the perfect participle passive:

1. In *e*-verbs with consonantal root-*auslaut* they both had the same stress as the infinitive: Russ. *нести*: *несл̃а, несл̃о, несен̃а, несен̃о*; *грызть*: *грызл̃а, -грызл̃ен, -ена, -ено*.

2. In (*i*)*e*-verbs with a monosyllabic stem ending in a vowel in the 2nd and 3rd person singular aorist, the *l*-participle and the perfect participle passive agree in so far as there is a correlation between their form and that of the aorist.

Serbo-Croatian *bī* : *bīla* : *bijēna*

» *pī* : *pīla* : *pīt*

3. In verbs with an infinitive stem in *-ě-*, *-a-*, *-i-*, there was originally complete agreement between the place of stress in the *l*-participle and the *n*-participle, an agreement which is, however, obscured by the fact that where in the *l*-participle we have a stressed (*-ě-*), *-ā-*, *-ī-*, in the perfect participle passive we have retraction with neo-acute, as the vowel preceding the *-n-* in proto-Slavonic has become circumflex.

Čak. (Novi) *brīsat* : *brīsāl*, *-ala* : *brīsāna*

*pīsāt* : *pīsāl*, *-āla* : *pīsān*

*brāt* : *pōbrāl*, *-ālā* : *nābrān* : *-brānā*

In the definite form we expect

(a) in the case of acute root-stress to find the same accent as in the indefinite, which in fact is what we find: Russ. *сделан* : *сделанный*; *открыт* : *открытый*.

(b) in the case of a neo-acute root-stress in the indefinite form to find in the definite form the same accent: Russ. *написан* : *написанный*, *заплатен* : *заплатенный* (from *платить*).

(c) in the case of marginal end-stress in the indefinite form we expect retraction to the penultimate syllable and neo-acute. Russ. *принесён*, *-енá*, *-енó* : *принесённый* agrees with this.

(d) in the case of mobile stress in the indefinite forms there are theoretically two possibilities: *\*nāčēt̃* : *\*nāčēt̃j̃* and *\*nāčēt̃j̃* (page 102 ff).

Russian realises the second possibility: *наятóй*, *нанятóй*, *запертóй*, etc.

In Posavina on the other hand we find (*pro*)*klētī* (Ivšić, op. cit. 103).

In the mobile *n*-participles Russian has by analogy formed the definite form from the short forms which stress the first syllable: *пóбранный*, *о́бранный*. Here, too, Posavina has retraction with neo-acute: *неопрānī* (Ivšić op. cit. 104).

## H. Infinitive.

In proto-Slavonic the infinitive stresses either the suffix *-ti* or a preceding syllable, whose vowel is then acute. The infinitive with more than one syllable<sup>115</sup> in front of *-ti* always belongs to the last group: either the suffix *-a-*, *-ě-*, *-i-*, *-nq-*, is stressed, or else a preceding syllable.

Monosyllabic infinitive stems may have root-stress and end-stress in the infinitive. With regard to the historical relation between these, see page 15 f.

Let us first investigate the state of affairs in Serbo-Croatian (Štokavian):

1. Infinitives with root-stress and acute: *smjēti*, *dòspjeti*, *pljēti*, *krīti*, *mīti*, *šīti*, *bīti* («beat» and «be»), *znāti*, *klāti*, *žēti* (*žnjēm*), *tīti*, *čūti*, *pīti*, *vīti*, *dāti*, *dūti*, *grīsti*, *jēsti*, *klāsti*, *krāsti*, *-ljēci*, *-ljēsti*, *prēsti* . .

2. Infinitives with end-stress show short vowel, or long vowel deriving from an original normal diphthong (i.e. potential Slavonic circumflex), in the root-syllable: *mēsti*, *bōsti*, *cvāsti*, *črpsti*, *drijēti*, *grēsti*, *mēsti*, *mrijēti*, *klēti*, *rāsti*, *tūci*, *vřsti*, *žēti* (*žmēm*), *rēci*, *mōci* . .<sup>116</sup>

3. Retraction of the ictus to the syllable preceding *-ti* has taken place in prefix verbs with a stem ending in a long vowel: *mrijēti* : *ūmrijēti* (< *\*mrijetī* : *\*umrijetī*), cf. Rešetar RESl. XVII, p. 66 f. On the other hand we have *plēsti* : *oplēsti*; *mēsti* : *izmēsti*, etc. The form *ūmrijēti* must be assumed to have had a neo-acute in the root-syllable. In Čak. (Novi) where the *-i* of the infinitive has been lost, a secondarily stressed long root-vowel acquires neo-acute: *trést*, *kljēt*, *zakljēt*, *zēt* (to take), *počēt*, *zapēt*.

This state of affairs agrees very largely with what we find in Russian.

1. *сметь*, *крыть*, *шить*, *бить*, *дать*.

2. In a stem in a dental, labial or sibilant, stressed *-u* has regularly been retained; otherwise it has disappeared.

a. *нести*, *цвести*, *расти*, *трясти* . .

b. *мочь*, *беречь*, *стеречь*, *толочь*; *мереть*, *жать*, *взять* . .

Here, too, the new ictus syllable has acquired a neo-acute, as the stress is on the second pleophonic syllable in *мереть*, *стеречь*, *толочь*. In Old Russian and in Russian-Church Slavonic we find *-u* preserved after *т*: *мóуи*, *по́мóуи*, *во́лóуи*, *бе́реуи*, *оубе́реуи*, *сте́реуи*, besides *отсѣ́тъ* (Serbo-Croatian *sjěci*) [Uč. i chitr., Stang p. 71 f], *бе́реуи* (Ulož. 288a), *не́уи* (Domost. 16). Likewise we find examples in Russian dialects: *bere(k)čī*, *močī* in the

Guv. of Novgorod, (Jeremin, Sborn. 99, 5, p. 41 f), *берети, леи, пети, стереи, тологи* in the Guv. of Tvef (Smirnov, Sborn. 77, 9, p. 122). Apart from some instances of *моги* (besides *моги* = Serbo-Cr. *moći*, Slov. *moči*), the accentuation of which may be due to the influence of the present, -i after *z* seems to have disappeared wherever retraction of the ictus to the root-syllable has taken place.

In infinitives of verbs whose stem ends in a nasal or liquid we also find end-stressed forms in older Russian and Russian-Church Slavonic, while modern Russian only knows root-stressed forms: *взяті* (Triod' 1621, 96b; Lečebn. 17th century, Busl. 1352), *переплуті* (Raj myslenyj, Busl. 1122), *умреті* (Triod' 1621, 31a).

In infinitives, the stem of which ends in an old nasal or liquid, the ictus has apparently been retracted before the -i disappeared: *ѣти*, (Mark 12) *умрѣти* (J. 12), *изѣти* (Matt. 3, the Bible 1663)<sup>117</sup>. The question arises whether retraction here originally took place in compound verbs. As we know, verbs in *\*-eti*, *\*-erti* occur largely in compounds. The instances of disappearance of the final vowel which we find in stems in dental, labial and sibilant, such as *вѣсть*, etc., probably originated in compounds. Forms of this type are to be found already in Uč. i chitr. (1647) [Stang, p. 71].

3. In fact, in Russian too there seems to have been a tendency to retraction in the infinitives of prefixed verbs. In Uč. i chitr. we find: *оустерѣть* beside *стерѣти*; in Uloženije: *внѣсть, ѡтнѣсть, перевѣсть, свѣсть, привѣсть* but also *принесті, привесті, свѣсті, розвѣсті*; in Stoglav *оуѣсть* beside *вѣсті*. Here probably first the ictus has been retracted, and then the -i has become -ь or else disappeared, cf. *ѡтвѣстѣ* (Prosvěščenije Iosifa Sanina, 16th century, Busl. 948). We are here face to face with the same phenomenon as in Serbo-Croatian *mrijeti*: *umrijeti*.

Retraction of ictus in prefix formations is encountered in various Slavonic languages in various spheres within the verbal system. Nevertheless the development of this phenomenon is so uneven within the Slavonic languages that I am inclined to believe that we are here dealing with phenomena originating in the separate languages.

Thus, as already mentioned on page 148 f, in Serbo-Croatian we find retraction of the ictus to the root-syllable in prefix *i*-verbs of accent-class (c): *slōmī* as opposed to *lōmī*. In Osriniči even in the *e*-verbs: *plētē*: *oplētē*. In Ukrainian we find beside *сидіти, сидіти; лежати, лежати*, etc., with retraction: *засидіти, засидіти; належати, належати*, etc. (cf. van Wijk, Arch. f. sl. Phil. 37, p. 36). Obviously in Great Russian this tendency to retraction in the compound verbs has made itself felt especially in certain words which are predominantly used in the prefix form: *помини* (< *\*pomnēti*), *помню*, etc., with stress on *no-* in all forms. Cf. Russ. dialect *помини* (Rjazan.) *pōml'it'* (Tot'ma), *zāpōml'u*, etc. The verb

*mniti* belongs to accent-type (c): Old Russian *мнимо, мните*. Furthermore we also find this phenomenon in compounds with *zvēti*: Russ. *заподозрѣти*, Old Russ. *оузрѣти* (Oxt. 1594), *прізрѣти* (Torž. XVI century) and others, see Vasiljev, Kamora, p. 103. The form *достѣти* (Domost. 6, etc.) is clearly of the same kind. In many dialects we find a contrast: *положити, предположити* (for example Kostroma, Sborn. 73, 5, p. 188). I believe that the development must have been *\*pomnēti, \*pomniti > \*pomnēti, \*pomniti > pōmni, pōmni*. The dialect forms quoted show that *o* was neo-acute.

In Bulgarian prefix verbs the ictus is withdrawn in -axъ and -uxъ aorists which are accentually different from the present: *ниша: пишъ: написъ: говоря: говорихъ: поговориъ: нима: нимахъ, написихъ* (Beaulieux, Grammaire de la langue bulgare p. 174).

We shall have to say a few words on the infinitive in West Slavonic.

In Czech we find the expected long vowel in infinitives like *dāti, stāti se, klāsti, pāsti, býti, žiti, jisti*, etc., where the old accented acute vowel has preserved its length according to the sound-laws. To this type clearly belong *brāti < \*brāti; hnāti*, etc. See Trávníček, Mluvnice, p. 260. In *mřiti, titi, piti (pnouti)*, Old Czech *třieti, pieti*, the length may have been preserved because it occurred in a pretonic position. The length in *nēsti, plēsti, vēsti, rūsti, būsti, řici, sici* (as opposed to *moci*) must be secondary. In the dialects we also have *nest, vest, plest* (Trávníček, p. 268).

In Slovincian we find short-stage vocalism in *pliesc, řiec, miuc, vjiesc, mjiesc, niesc, liesc, pŕasc (< pŕesti), bāc (< byti), šāc (< šiti)* but we find *třęc, cīc (tŕa), vjīsc (vjāza), tŕisc (tŕāza), jīc, klīc*, probably owing to the retention of a long vowel in pretonic position. Here the old Lekhite distribution of short and long vowel seems to have been preserved. In *riesc* we would have expected a long vowel. Rozwadowski believes that there was a tendency in Slovincian to allow the short vowel to spread at the expense of the long vowel, while Polish shows the opposite tendency (Gram. jez. pol., p. 83; cf. Łoś, Gram. Polska I, p. 102).

According to Rozwadowski (op. cit.) in older Polish, too, the long vowel has retained its length in the infinitive in the pretonic position, as we would expect, while long stressed acute vowel has been shortened. For that reason we find *róśc, wlēc, trząśc, sprząc, kłāc* (Serbo-Croatian *rāsti, vůci, trēsti, zaprēci, klēti*), but *jeśc, paśc, kraśc* (S.-Cr. *jěsti, pāsti, krāsti*). But Polish, in common with Czech, has a tendency to analogical lengthening in the infinitive: *prząśc, klóc* (Serbo-Croatian *prēsti, klāti*). Old Polish still has *prześc*. In *bóśc, móc, wiếśc, niếśc* Roswadowski speaks of lengthening «po zaniku końcowej samogłoski».

## I. Supine.

Of the Slavonic languages only Slovene still actively employs the supine. In Old Czech it also frequently occurred; today it has been replaced by the infinitive, but we find certain relics, such as *jdu spat* besides infinitive *spáti* (Trávníček, Mluvnice, p. 384 f).

The supine in Slovene shows circumflex: e.g. *brât, jêst, krît, pâst, pît, sêst, spât*. In the same way Czech shows short vowel, see Trávníček, loc. cit. There are grounds therefore for assuming circumflex in these forms already in proto-Slavonic. The reason for circumflex in the supine has been dealt with on page 24: it is my belief that the *-tu*-stem was mobile, and that the intonation of *\*dât* can be explained on precisely the same lines as that of *\*sýnъ*.

Bulachovskij deals with the Slov. supine in an interesting article in Zeitschr. f. slav. Phil. IV, p. 69 ff. In West Slovene dialects we find in the supine *ljúbit, prósit, stópat, strádat*, but *drobît, dajât, snovât*. Further we find *klěcat, držat, dělat* (Breznik). It seems quite clear that *drobît, dajât, snovât* come from *\*drōbît, \*dājat, \*snōvat*. These verbs belong to presents of type (c), and it would therefore appear that *\*drōbît* has the same relationship to *\*dât* as Proto-Slavonic *\*rōditi : \*roditi* to *\*dāl : dal*.

In *ljúbit, hódit, prósit, stópat, strádat*, etc., the ictus must have been retracted from the *-i-*, *-a-* in Slovene: this is apparent from the pronunciation *o* (not *ø*) in *hódit, prósit*. These verbs belong either to accent-type (b) or else to the group which has retraction in the present owing to contraction. Here the stressed syllable in the supine has obviously had a short vowel, arising from an acute: *ljúbit* < *\*l'jubit* < *\*l'ubiti*, etc., (cf. *želel* besides *želēla, želēlo*; Breznik, Gr., p. 120). This acute is what we should have expected: the vowel of the medial syllable (*-i-*, *-a-*) was stressed as in the *l*-participle of the same verbal types. In the type *ravnât* (present *ravnâm*) the ictus is not retracted. I consider this type analogical (cf. p. 147). To the same type as *ljúbit* also belong supines of verbs in *\*-ēti* and in *-āti* < *\*-ēti, klěcat, déržat*; cf. also sup. *sedet, pisat*, with ictus on the first syllable according to Škrabec (see Bulachovskij, op. cit.).

The supine of root-stressed verbs has the same stress as the infinitive: *dělat* as *dělati*. Here, *a* has the function of a short and not of a long vowel.

Thus in the supine we find precisely the same accentuation as in the *l*-participle.:

<i>*dât</i>	agrees with	<i>*dāl</i> — <i>*dalā</i>
<i>*drōbît</i>	» »	<i>*rōditi</i> — <i>*roditi</i>
<i>*l'ubiti, *stradāti</i>	» »	<i>*l'ubiti, *stradāti</i>
<i>*pisati, *sēdēti</i>	» »	<i>*pisati, *sēdēti</i>
<i>*dělāti</i>	» »	<i>*dělāti</i>

## The Relationship between the Slavonic and Baltic Verbal Accentuation.

In dealing with the accentuation of nouns I compared each stem-type in turn with Lithuanian. In dealing with the verbal system I have elected to postpone this comparison to the end. Here the material available for comparison is far more restricted, because in this sphere the two groups of languages show far greater differences. Only some of the present formations are the same. Past forms deviate considerably. Nevertheless there are a number of important points where a comparison is possible, and which we shall investigate.

## 1. Present.

## a. Pure thematic stems.

In the pure thematic stems we discovered in Slavonic first of all a few verbs with constant root-stress: R. *nézy*, etc. — Latv. *nākt*, pres. *nāku* (as opposed to *sākt*, pres. *sāku*) may represent this type in Baltic, although in Lithuanian pure *e/o*-stems appear to have belonged to the originally mobile type, cf. *augās* (acc. *augantį*), *bėgās, mokās, šokās, vedās*, etc.

Slavonic and Baltic have a characteristic feature in common, viz. that the majority of verbs of the type Sanskrit *bhārati* do not have fixed stress on the root. In Slavonic the majority of the pure *e/o*-verbs — as we have seen — have marginal end-stress, but there is a great deal of evidence to suggest that this stress conceals an original mobility with interchange between the first syllable and the last.

In Lithuanian all presents today have ictus on a non-final syllable (the same in all personal forms) apart from the forms where de Saussure's law applies. A closer inspection, however, reveals a contradiction beneath this apparently smooth surface: we find one type which in the compound forms retracts the stress back to the prefix, and one which retains the stress on the root-syllable in compounds as well. The first type has mobile stress in the present participle active, the other has in Daukša and in some modern dialects fixed stress on the rootsyllable.

1. *nėveda, nēkalba, nēkelia, nēgirdi; vedās : vėdanti, kalbās, keliās, ...; augās, duodās* (in the case of verbs with acute root-syllable, prefix stress does not occur, as the ictus would in many cases have to be thrown onto the acute root-syllable according to de Saussure's law).

2. *nerašda, nevirsta, nešaukia, nesāko, negāli; rašdās, virstās, šaukia, sākas, gālį; neliēka : liēkas ...; Daukša : padēst, atliekt' ...*

The rule we can formulate in Lithuanian on the basis of modern dialects and Daukša, is that type 1 occurs in pure *a*-stems, *ia*-stems with short vocalism in the root-syllable, and a number of *i*-stems, while



type 2 occurs in characterised *a*-stems (stems in *-sta-* and stems with a nasal infix), *īa*-stems with a long vocalism in the root-syllable, *ā*-stems, certain *i*-stems, and most athematic verbs (even after their subsequent transformation into *a*-stems).

As far as the historical interpretation of this state of affairs is concerned, Būga maintains (Žodynas XXXIV, XXXIX) that type 1 goes back to an originally end-stressed type, while type 2 continues old root-stress. He believes that *\*vèduo*, *\*nèveduo*, *\*vèdamē*, *\*nèvedamē* .. have arisen from *\*vedūo*, *\*nevedūo*, *\*vedamē*, *\*nevedamē* .. as a result of a phonetic retraction from the last syllable to the first. He compares this retraction with the one which he believes occurred in the instrumental singular *kātinu*, nom.-acc. dual *kātinu*, acc. pl. *kātinus*, instr. sing. *vālanda*, nom. acc. dual *vālandi*, acc. pl. *vālandas*, etc. In my opinion, however, what has been stated above makes it probable that in the noun declension we are dealing not with a phonetic retraction but with an inherited mobility. Retraction in the verbs would thus constitute an isolated phonetic phenomenon, and would demand a special explanation.

It is of course conceivable that special rules of stress may have operated in the verbs. We know, for example, that in Vedic the finite verb in certain cases is enclitic, and that ictus in Greek finite verb forms has been stabilised on a non-final syllable, evidently on the basis of an original enclisis. On the other hand it is difficult to discover a reason for a retraction of this kind in Lithuanian. It is hardly possible to assume enclisis as the basis for an accentuation such as *nèvedu*, etc., as this would presume that only verbs belonging to one type of accentuation could have been enclitic.

As we know, however, certain forms in Slavonic suggest that the marginally end-stressed verbs (type c) were originally mobile. And in the same way it is possible, in my opinion, to explain the Lithuanian verbs of type 1. In Lithuanian, however, as opposed to Slavonic, the stress on the first syllable has been generalised, which may be due to the dominant position acquired by the old third person singular in Baltic, where the third person plural and dual have disappeared. For this reason I believe that Lith. *privedu*, *privedi*, *priveda*, *privedame*, *privedate* arose on the basis of an older *\*prieveduo*, *\*prievedie*, *\*priveda* — *\*privedamē*, *\*privedatē*, and that Lith. *privedu* is a formation of the same type as Čud. NT. *nómpacy*.

In Old Prussian the verbs can be placed according to accent in two groups: I, the verbs with stress on the thematic vowel; and II, those with stress on the root-syllable. To type II belong *ā*-verbs, certain *a*-verbs, *īa*-verbs, certain *i*-verbs, and — to a certain extent at any rate — athematic verbs. Verbs which are clearly pure *a*-verbs belong to type I. Thus genetically we must identify Prussian type I with Lithuanian type 1. The question now arises — how can the situation we have assumed in proto-Lithuanian,

with interchange between the first and last syllable and skipping of the thematic vowel, be compatible with the situation we find in Prussian, where the thematic vowel is in fact stressed, as in *giwassi* (2x), *giwa* (3x)<sup>118</sup>, *giwammāi*, pres. part. *giwāntei*; (Cf. Russ. *жучь, жуеуь*, Čud. NT. *жучь*); *skellāntei*, *schkellānts* (Dauksa: *skelq̃s*); first pers. pl. *wertemmai*, *poprestemmai*, *perwekammai*, *klantemmai*? It may be possible that in Prussian the paradigm *\*gīvō*, *\*gīvasei*, *\*gīva*; *\*gīvamāi*, *\*gīvatē* has been levelled according to the plural forms, as in Slavonic. This gave rise to the third person *gīvā*, which in turn produced *\*gīvāsei*, *\*gīvāmai*... It is remarkable that in the second person singular besides 2x *giwassi* we find 1x *giwasi*. This may be a relic of the old root-stress in the singular.

Thus no contradiction of old standing need be assumed between Slavonic and Baltic as far as the bulk of the pure thematic stems is concerned.

Disagreement exists between Lithuanian *imti*: *nè-ima* — *imq̃s* of type 1 and Prussian *immimai*, *immati* of type II. In this verb and verbs of the same type, Slavonic has recessive stress (type b), cf. Russian *примь, примеуь*; Old Russ. *возьмь : възьмеуь*. In Slavonic we have postulated original stress on the thematic vowel, and this is also supported by Sanskr. *tudāti* (likewise with zero grade in the root).<sup>119</sup> I assume that here we have a retraction of the ictus from the thematic vowel in Prussian and a secondary transference of the thematically stressed verbs with a short root vowel to type 1 in Lithuanian. I shall deal with this matter in greater detail in connection with the *īe/o*-verbs.

#### b. *īe/o*-verbs.

In Slavonic we find here both type *a*, *b*, and *c*, although *c* appears originally to have been limited to a few verbs, mainly verbs with root-syllable ending in a vowel, such as Russ. *дарь, -ѣуь*, Slov. *dajem* (*dajem*); Russ. *смеюсь*, Slov. *smějeme se*, etc. Many of the words belonging to this group in the separate languages appear to be innovations, such as Russian *кырь, -ѣуь*, Slov. *kujem* for older *kovo*.

In Lithuanian we find type 1 and type 2. These are distributed in such a way that words with long vocalism in the root syllable belong to type 2, while words with short vocalism in the root syllable belong to type 1: *nešaiška* — *šaiškiq̃s* but *nėkelia* — *keliq̃s*. Thus the two types are distributed according to phonetic criteria, and this makes it reasonable to suppose that the historical explanation must also be phonetic.

As the verb *šaiškia* was not mobile, we must conclude either that both types had originally fixed stress on the root or that they both had fixed stress on the thematic vowel. The question then arises whether in

Lithuanian it is possible to envisage either a retraction from a short vowel to a preceding long vowel (i.e. *\*šaukià* > *šaukia*) or a retraction from a short vowel to a preceding prefix (*\*nekèlia* > *nèkelia*). The latter change is hardly conceivable in Lithuanian (cf. *preikālas*, etc.).

On the other hand there are signs that retraction under certain circumstances has taken place from stressed *a* in a final syllable to the preceding syllable. Nieminen maintains in his book *Der uridg. Ausgang -āi des Nom.-Akk. Pl. N. im Baltischen*, page 151 ff, that ictus in Lithuanian has been retracted from short *a* in stressed final syllables. To support his argument he adduces first of all *ānas* (acc. sing. M. F. *anā*, gen. sing. M. *anó* . .) in Daukša. But here *anās* is used too, and this form also occurs in living dialects (Būga, Žod. 78; Skardžius, Daukšos akc. 187). In the same way *katarās* (e.g. in Gervėčiai; Arumaa page 57) invalidates the suggestion — made by Nieminen on page 155 — that *\*pelenās* has regularly become *\*pėlenas*.

On the other hand, it seems to me that Nieminen's argument is hard to reject as far as *kiekas*, *tiekas*, Daukša *kiēkas*, neuter *kiēkag*, is concerned. These words apparently belong to the old end-stressed pronouns, cf. genitive *kiekó* (Daukša, Post. 208, 4; 254, 13). In the same way he may be right as far as the contrasts *teipa-* : *teipō* are concerned. Cf. in Daukša *teipó*, *teipógi*, beside *téipaia*, *téipaiau*, *téipag* (beside *teipág*). I am therefore inclined to believe that Nieminen is right in the case of words with a long vowel preceding a final syllable with a stressed *a*.

The accentuation of the definite form *gerās-is* (acc. *gērā-jī*) beside *gēras*, *gērs* (< *\*gēras*) suggests, I believe, that *gēras* is an analogical form in the mobile declension, formed on the pattern of the type *meñkas*, etc., which has arisen regularly from *\*menkās*, etc.

I am prepared to believe that Nieminen (page 154 f.) is right in stating that short *a*, occurring in the literary language and a number of dialects in *māno*, *tāvo*, *sāvo*, is due to old end-stress: *\*manō*, *\*tavō*, *\*savō*. But this does not necessarily mean that the forms *mānas*, *tāvas*, *sāvas* are due to phonetic retraction, as these pronouns at an early stage tended to pass into the mobile declension (Daukša acc. sing. *mānā*, *tāva*, *sāva*, gen. pl. *manū*, *tavū*), and *mānas*, etc., fits into the mobile schema. The vocative form *mañs* < *\*manās* quoted from Kurschat does in fact suggest that in the dialect concerned end-stress was retained in this form right up to the

time of apocope. The form *kienās* (Gervėčiai, Zietela, according to Arumaa Lit. mundartl. Texte, p. 57), however, does not agree with the rule, but might easily be explained as a formation on the pattern of *\*manās* . .

Reverting to the *ia*-verbs, there is of course no reason why one should not assume that some of the long-vowel verbs have been root-stressed from of old (cf. Russ. *на́ры*, -еуь . .), and that some of the short-vowel verbs are old mobiles (cf. Russ. *да́ро*, -еуь; Čud. NT. *да́ро*). But it would be remarkable if the bulk of the *ia*-verbs had from the very beginning shown a different stress based on the vowel quantity of the root. There is reason to believe that a certain number of words from both groups (*nešaukia* — *šaukiās* and *nèkelia* — *keliās*) were originally stressed in the same way, since they are not systematically distinguished from one another either in meaning or function. I believe therefore that the contrast between the type *šaukia* and the type *kelia* has arisen as follows: *\*šaukià*, *\*nešaukià* became *šaukia*, *nešaukia*, while *\*kelià*, *\*nekelià* remained. In the first type the stress of the third person has then spread to the other forms, giving *\*šaukiamē*, *\*šaukiatē*, *šaukiās*, etc.<sup>120</sup> In the other type *\*keliāmē*, *\*keliātē* . . became *\*keliāmē*, *\*keliātē* . . either by analogy, *\*kelià* being considered as an example of end-stress instead of thematic stress, or as a result of de Saussure's law finally giving rise to these forms. By one of these two processes the accentuation of these forms came to coincide with that of *\*nešamē*, *\*nešatē* . ., and the type *kelia* thus became mobile. The accentuation *\*šaukià-*, *\*kelià-* would correspond to the slav. type *b*, to which most of the slavonic *ie*-verbs belong.

The transition of *ima*, etc., to type 1 in Lithuanian (cf. page 157) can be explained in the same way as in the case of the type *kelia*.

It is not necessary, therefore, to assume that any contradiction exists between Slavonic and Lithuanian as far as the *ie/o*-stems are concerned.

The permissive forms *tevertiž*, *telaukiž* (besides pres. *neveřcia*, *neláuikia*) as opposed to *tetruñkie*, *tepýkstie* (besides *netruñka*, *nepýksta*), cf. p. 165<sup>121</sup>, also suggest a secondary retraction in Lithuanian *ia*-presents with a long root vowel. Furthermore, these forms point to an original difference between the type *veřcia* and the other extended *a*-presents (*truñka*, *pýksta*).

Note. In Daukša's language *tāriās* (cf. Skardžius, Daukšos akcentologija, page 214) forms an exception to the rule for the stress of *ie/o*-stems in Lithuanian. I am unable to explain this anomaly.

That *ie/o*-verbs to a large extent were non-root-stressed is also suggested by Latvian, where in a great many cases a glottal stop occurs in the root syllable: *ārt*, *cēlt*, *dzelt*, *grābt*, *diēgt*, *jūgt*, *juōst*, *vīlt* . . besides *bārt*, *buřt*, *duřt*, *īrt*, *kārt*, *kūlt*, *l'āūt*, *mālt*, *rāt*, *rīt*, *sēt*, *snaūst*, *spēt*, *sp'l'āūt*, *šāūt*, *šk'īlt*, *šk'īrt*, *tāst*, *veřt*, *veřt*, see Endzelin KZ III, page 253. (However, it is only, as we know, in words with an acute root syllable

that we can trace a difference between originally root-stressed and other verbs: circumflex and short vowels are not affected by the Latvian retraction of the ictus to the first syllable).

In Prussian it is difficult to find examples of *ie/o*-stems. The ones that can be described with any degree of certainty as *ie/o*-verbs are all root-stressed (type 2): *etwērpī*, *etwiērpimai*; *gēide*, *giēidi* (cf. Lith. *geidžia*), *pokūnti* (inf. *pokūnst*), *kniēipe*, *girrimai* (if = Lith. *giria*). It is possible that in Prussian a general retraction from the thematic vowel has taken place without regard to the quantity of the preceding vowel. It is, however, also possible that in Prussian, as in Lithuanian, ictus has regularly been retracted only from a stressed final *-a*<sup>122</sup> to a preceding syllable with a long vowel, i.e. that *\*geidiā* became *\*gēidiā*. In the first person sing. we should expect *\*gēidiō*. On the pattern of *\*geidiō* : *\*gēidiā* we might get by analogy *\*giriō* : *\*giriā*; and root-stress then spread to all forms. In *\*imā* > Pr. *\*ima* (see above page 157) a similar development may have taken place.

The implication of this theory — that retraction to a long root vowel from a following stressed final *a* should have taken place in Prussian, just as in Lithuanian — should not cause any misgivings. The form *\*gīvā*, which must be assumed to be the correct reading for *giwa*, admittedly disagrees with this theory, but here the end stress is, no doubt, secondary; cf. above, p. 156. It may have arisen at a later period than the assumed retraction. As we know, Lithuanian today contains a host of words with stressed *-a* and a preceding long syllable (*rankà* ..), where the *-a* has arisen from *\*ā* according to Leskien's law.

My investigations into the Baltic *a*- and *ia*-stems have led me to the theory that the Lithuanian type 1 (= Prussian I) is a continuation of old mobilia (= Slavonic type c), while Lithuanian type 2 (= Prussian II) continues (a) old root-stressed verbs (= Slavonic type a), (b) old thematically stressed verbs (= Slavonic type b). The question now arises whether we find any traces of thematic stress in Lithuanian dialects.

It is generally known that in certain East-Lithuanian dialects — and also to some extent in Daukša — stress on *-o*-, *-ē*-, respectively on *-si*, is found in some reflexive forms in the preterite. Thus in Arumaa's texts we find in Gervėčiai: *sėdaūs*, *sėdosi*, *sėdomės*; *radosi*; *dėjōs*; *ēmēs*; Dieveniškis: *sėdaūs*, *sėdōs*; *radosi*; *stojosi*; Lazūnai: *sedōs*, *stojōs*, *radōs*, *ēmēs*, *metēs*; Zietela: *sėdosi*, *gulēs*. Cf. also Būga KZ 52, page 254 ff. In Daukša the end-stressed forms occur less frequently than the root-stressed forms of the same verbs. However, examples of end-stress are found in *iūkēs*, *kelēs*, *likōs*, *sedōs*, *stoiōs*, *teikēs*, *tikōs*, *ižpažinōs*, *weikēs* (see Skardžius, Daukšos akcentologija, page 201). In the 1605 Catechism we find *kelēs* (a number of examples).

In the main two views have been asserted with regard to these forms: while van Wijk (Intonationssysteme, page 21, 40), Būga KZ 52, page 225, and Skardžius, op. cit., have assumed that in this case we are dealing with an old end-stress, Schulze KZ 44, page 131, and Specht KZ 53, page 91, maintain that ictus has been advanced from the first syllable owing to the addition of an enclitic pronoun.

As we have seen, a movement of the last-mentioned type has taken place in Russian (*нагал* — *нагался*; Čud. NT. 1. p. pres. *ностыжуся*). That this should have occurred in Lithuanian, however, is unlikely. We must take into account all the cases where the stress has remained on the first syllable, and which make it unlikely that a regular phonetic advance from the first syllable can have taken place. It is of course possible, to maintain — and it is even probable — that end-stress has been preserved especially in words where the reflexive use is predominant. It is possible therefore, that *vėdēs* is an analogous formation, while *kėlēs* had preserved the old stress owing to the frequent use of this word in the reflexive forms. This is, however, undoubtedly not the only factor involved; thus I know of no examples of end-stress in verbs with infinitive in *-yti*.

In Zietela I have noticed a stressed *-si* occurring in reflexive gerundial forms, beside end-stressed simplicia of the same gerunds: *žmogus numirė dirbdamī*, *dirbdamā*, *dirbdamōs*, *dirbdamosi*. I consider it highly probable that *dirbdamosi* is the reflexive form of *dirbdamā*. Just why the ictus has come to rest on the reflexive particle, I cannot explain. But just as *dirbdamosi* must be assumed to have been formed from *dirbdamā*, so *sėdosi*, *stojosi*, *radosi*, *kėlēs*, etc., may be assumed to have been formed from *\*sėdō*, *\*stojō*, *\*radō*, *\*kėlē*, etc. In the simple forms the stress has, for some reason or other, come to be placed on the first syllable. The plural forms *sėdomēs*, *kėlēmēs*, etc., must go back to *\*sėdomēs*, *\*kėlēmēs*, etc. But this does not necessarily mean that the paradigm was originally marginally end-stressed. It is possible that originally there was columnal stress on *\*ā*- and *\*ē*- respectively and that later, according to de Saussure's law, *\*ā* became *\*ā*, etc., (after which the ictus was transferred to *\*sie* in the same way as in the third person). The forms *sedāmēs*, *sedātēs*, *kėlēmēs* (Tverečius) are probably late formations on the analogy of the third person.

These end-stresses in the preterite, however, are not the only instances of this kind to occur. In the dialect in Zietela I frequently noted 3. p. pres. *sėdasi* during my stay. I repeatedly heard this pronunciation quite clearly, and it was confirmed by Gerullis. Arumaa has also confirmed it in a letter addressed to me. That this is in principle an old form is suggested by a peculiarity in Kurschat's NT, to which Schulze draws attention in KZ 44, page 131 ff. Here we find *stōti* but *stōjas*<sup>123</sup>, *stōjos(i)*, *stōsis*, *stōkis*, *stōjesi*. *Stōjosi* and *apstōjo*, *stōkis* and *pastōjat* are according to Schulze to be

found in the immediate vicinity of one another in the text. *Stójaus, stójosi* only occur sporadically — and probably incorrectly. Furthermore *sēsti* is regularly found, as opposed to *(pasi)sėskis*. The circumflex in the reflexive forms must be attributed to metatony, and there must be an explanation for this. This explanation in turn will have to be sought in the peculiarity which these very verbs show in other dialects, viz. that the reflexive pronoun was stressed. Consequently these forms from Kurschat, where the circumflex also occurs in the present (future and infinitive), confirm the correctness of the form *sėdasi* beside *sėdosi* in Zietela.<sup>124</sup>

This suggests that the end-stress in the preterite, of which there are most examples, is only a fragment of an older system, and may even be an analogical formation based on the present.

In these accentuations it might be possible to see relics of a type with a fixed ictus on the thematic vowel. The answer to the question: what stem-types do the verbs we are here dealing with belong to, is simply, that here we have examples both of pure *a*-stems (*sėda*) and, as it appears, of *ia*-stems (*stoja*) and *i*-stems. But for the moment the material does not enable us to draw more precise conclusions.

The possibility is not excluded, however, that *sėdomės*, etc., may belong to a mobile paradigm *\*sėdā : \*sėdāmė*, where the accentuation of the plural has been generalised in the reflexive form and the accentuation of the singular in the non-reflexive.

Thus it is difficult to draw any definite conclusions on the basis of these Lithuanian forms.

#### c. Nasal verbs.

While the pure *a*-verbs in Lithuanian show originally mobile stress, the extended *a*-stems — verbs with a nasal infix as well as verbs with a present in *-sta-*, *-na-*, and to a certain extent in *-ia-* (see above) — show root-stress in the compound forms and constant root-stress in the present participle: cf.: *patiñka : tiñkas*, etc. In Prussian, in the same way, we find the corresponding form *polinka*.

As we noted when dealing with the *ia*-verbs, in Lithuanian adherence to type 2 may theoretically be due either to old root-stress or to retraction from the thematic vowel to a long root vowel. In Slavonic we find old root-stress in the few words of this type which occur (*sędo, lego, będo*). These, however, are secondary — although admittedly formed on the basis of an old pattern — and are not to be found in Lithuanian. Consequently on this point there is no basis for comparison between Slavonic and Baltic.<sup>125</sup>

While the nasal infix plays a very important role in Baltic, as opposed to Slavonic, the nasal suffix plays an exceptionally important role in Slavonic, but is of hardly any importance in Baltic. The Lithuanian verbs in *-na-* are largely secondary and confined to some of the dialects: *eina*, beside dialect and Old Lithuanian *eti*; dialect *pjáuina* beside literary Lithuanian *pjáuja*, etc. Lithuanian *gáuina*, Prussian *pogāunai*, is undoubtedly an old nasal verb. Prussian has furthermore *postānai, postānimai*, which agrees with Slavonic *\*stanę*, Russian *смáну*.

#### d. ā-presents.

These occur very frequently in Baltic, where they appear as present formations of verbs in *-īti-*. In Lithuanian they are root-stressed (type 2): *nesāko, sākąs*. In Slavonic there are no corresponding formations. While the Baltic *ā*-verbs are semi-thematic, Slavonic has only one *ā*-stem, the athematic *\*jēmamь*. There is reason to assume that this verb had a mobile stress in proto-Slavonic (cf. page 128): *\*jēmamь : \*jēmamь/ō*. But as its flexion differs from the Baltic *ā*-verbs, it cannot be directly compared with them.

#### e. i-presents.

Here, too, we are faced with the difficulty which arises owing to the fact that Baltic and Slavonic only partly agree as far as word formation is concerned. In Slavonic, *i*-presents belong partly to infinitives in *-iti*, partly to infinitives in *-ěti*. The first group is accented according to type (a), (b), or (c), the second, as far as we can see, only according to types (a) and (c). We find no counterpart in Baltic to the type with infinitive in *-iti*, Russ. *прáвило, -ишь (прáвить)*; *люблю, люблюшь (любíть)* and *зощу, -ишь (зощúть)*. On the other hand we may reasonably expect to find counterparts to Russ. *слюшу, -ишь (слышуать)* and *сужу, -ишь (судéть)*.

In Lithuanian some of these verbs are of type 1, some of type 2. Type 1 includes the old mobilia, type 2 (Prussian type II), the old root-stressed verbs.

The *i*-verbs contain few examples where it is possible to establish any etymological identity as between Slavonic and Baltic. In Daukša we find:

1. *dėvįs, regįs*, etc., with end-stress, — *nėbjauris, nēbodis, pāgardi, prālydi, nēmūni, nēregi*, etc.

2. *gailįs, gālįs, girdįs, gūlįs, liūdįs, mýlįs, nórįs, pavýdįs, sėdįs, stovįs, turįs, vėizdįs* — *negaili, negāli*, etc.

Here *vėizdįs* agrees with Russian *вúжы* — the latter is in fact an old athematic verb; cf. Slavonic *vižďь, vidomь* — but *sėdįs* does not agree with *сужу*.

It is possible that Baltic once possessed a columnally suffix-stressed type of *i*-verb. The material at our disposal makes it impossible to decide what was the fate of this type of Baltic *i*-verb. There are no grounds for assuming any regular retraction from *-i-* to the preceding long syllable (cf. *širdis*; *širdi* : *širdžiū* besides *vaikas*, *vaika*, *vaikū*). Nor is it possible to discover any principle of distribution which makes a retraction of this kind probable, as in the *ja*-presents. It must therefore be assumed that these verbs have by levelling been transferred to one of the other groups, or — on the basis of principles which are unknown to us — to both.

#### f. Athematic verbs.

Apart from *imam*, which has been dealt with above, these verbs in Slavonic have replaced mobile stress with end-stress. In Lithuanian, too, we find stabilisation of the stress in the majority of these verbs, but in this case on the root-syllable (type 2).

In Daukša we find *ne-ést'* — *ésas*, *padést* — *nudédas*; *priéitis*, *prieimé*; *atliékt*, *atliéktis*; pres. part. gen. pl. *miéganczių*; instr. pl. *ráudanczeis*; nom. pl. *sérqā*; Cf. also Prussian second person plural *asti*, which suggests root-stress, as the *\*-ē* has developed into *-i*.

We find traces of the old mobility in the Lithuanian present participle *duodās* — accusative *duodantį* and *édās* — *édantį*. Latvian *duôt* (beside dialect *duôt*) and *ést* also suggest that certain forms of these verbs had end-stress. It is possible, too, that the vowel shift in Latvian dialect *eimu*, *ejī*, *iet*, *eimam*, *eite* points back to an original mobility of Indo-European type (NTS 8, p. 257 seq.).

#### 2. Preterite.

In Baltic we find no trace of the *s*-aorist, nor of any directly preserved imperfect forms. All the preterites are formed with the help of the suffixes *-ā-* and *-ē-*. Of these preterite formations, those in *-ā-* belong in Modern Lithuanian to type 2, those in *-ē-* to type 1, unless they have a present in *-ā-*. Thus we have: *nesāko*, *nėvedė*, *nesākė*.

It seems, however, that this distribution is non-original, cf. the end-stressed forms from East-Lithuanian dialects and from Daukša which we have dealt with on page 160 ff. The stress of verbal substantives in *-imas* possibly suggests, too, another distribution of types 1 and 2 at an earlier stage (see Būga, *Žodynas* XLI ff.).

We find no counterpart in Slavonic to the suffix *-ē-*. On the other hand it is probable that the Slavonic aorist suffix *-a-* in *kova*, *pisa*, is identical with the Baltic *ā*-suffix. In Slavonic we find that this suffix has

been partly stressed: (*\*sālā*), partly unstressed (*\*kōva*), see page 131. In the latter case the ictus is retracted to a prefix (Serbo-Croatian *ōkovā*), which according to Slavonic principles proves old mobility: in proto-Slavonic there must have been a declension *\*kōva* : *\*kovamē/ō*. Lithuanian *nesūko* does not agree with this. It is possible that in the Lithuanian paradigm the ictus has been stabilised secondarily, perhaps under the influence of the constant root-stress in the *ā*-present.

#### 3. Imperative — Permissive.

In Lithuanian we find in compounds with *te-* (in the case of *ā*-stems also without *te-*) old optative forms, corresponding to those used as imperatives in Slavonic. Permissives of *ā*-verbs are root-stressed, just as the *ā*-presents are: (*te*)*sākai*. The other forms are end-stressed in the literary language: *teesiē*, *tevežiē*, *tedirbiē*, *tevertiē*, *teguliē* (with lateral forms in *-ỹ*), see Senn, Lit. Sprachlehre, p. 199.

According to Jaunius, however, a difference of stress occurs in Lithuanian in these forms too. He gives: *tedirbiē*, *tesukiē*, *telaukiē*, *tevertiē*, *tetikiē*, but *tetruñkie*, *tepỹkstie* (Gram. lit. jaz. p. 205). This points to suffix-stress in old mobile verbs and in those with columnal stress on the thematic vowel. Suffix-stress in end-stressed (originally mobile) and columnally suffix-stressed verbs is what we find in Slavonic too (cf. Russian *еэзѹ*, *нууѹ*). But Slavonic presupposes an acute suffix vowel, as ictus is not retracted in the plural forms (Russian *еэзѹме*, *нууѹме*). In *i*-verbs in Lithuanian we find a suffix *-ỹ*, which in the dialects has also spread to the *a*-verbs. This — like *iē* — is stressed in the literary language: *tegulỹ*. In the dialect in Tverėčius, however, we find as imperatives *pastāvīte*, *tūrītēs*, beside *pamīli*, *pakīli* (Otrębski, page 387). It is not unlikely that what we find in Tverėčius is based on the same principles as in Slavonic, viz. root-stress only in verbs with old fixed root-stress in the present. This is also supported by Lazūnai (imper.) *miēgi* (cf. *nemiēga* : *miēgas*), *pasākai* (cf. *atsāko*; *sākas*), *sēdzi*, *sēdžiūt* (*sēdis*) : *ragi*, *ragite*, *klousītēs* (*ja*-verb), cf. Arumaa Lit. mundartl. Texte, page 68.

In Prussian, too, it is possible that we have a trace of suffix-stress in the *a*-verb *imt*, as we find the spelling *imais* (1x), *imaiti* (1x) beside *immais* (1x), *immaiti* (1x) and *mm* in all other forms of the verb: *imma* (2x), *immats* (3x), *immimai* (2x) *immati* (1x). In Slavonic this verb belonged to the columnally stressed type (b), and this may have been the case in proto-Baltic as well (page 157).

In the *i*-verbs we find suffix-stress in *kirdijti* (2x), *milijti* (1x). Corresponding to *milijti* we have the present *milē*, which may be a substitute for an end-stressed (i.e. originally mobile) *i*-present. The type Russian

*cuđú, cuđúme*, etc., corresponds to this. (The 2. p. sing. imper. *mijlis* 1x may well be a misprint for *milijs*. Otherwise we should have to assume mobility in the old optative paradigm). Corresponding to *kirdijti*, however, we have present *kirdimai* — infinitive *kirdit*. This can either be explained by de Saussure's law — if we admit that this law operated in Prussian, at any rate in a medial syllable — or as a result of the present type with a columnal stress on the *-i-* suffix having become root-stressed (a hypothesis which is possible, but not proven). In neither of these cases can we expect to find any parallels in Slavonic, where de Saussure's law did not operate, and where type b does not appear to be old in verbs in *-i-* : *-ěti*.

#### 4. The Infinitive.

The infinitive formation in *-ti-* is common to Slavonic and Baltic, though the Slavonic infinitive must be an old locative (cf. *нечтѣ* stressed like [нѣ] *менѣ*), while in Lithuanian we must assume that in some cases it was an old locative (Žemaitic *-tę* : *-tęis*, *-tīs*), in others a dative (South-west Lithuanian *-tie*), while in yet other cases the form is ambiguous (literary Lithuanian *-t[i]* : *-tis*). Infinitives with acute, monosyllabic stem, such as *šókti, būti* agree in their accentuation with the Slavonic *\*lěsti, \*byti*. Furthermore, *něšti*, etc., may agree with Slavonic *\*nesti*, although the Slavonic form has secondarily advanced the ictus (see page 15 f). The Lithuanian forms have been the subject of various interpretations, and cannot be said to be entirely clear. (Cf. Stang, Mažvydas, p. 158, and the objections of H. Pedersen, *Études lituaniennes*, p. 6 ff).

In polysyllabic infinitive stems Baltic and Slavonic have types in *-āti-* (*-ōti-*?), *-ēti-*, *-īti-* in common.

Lithuanian verbs in *-īti-* have presents in *-ā-*, or, for certain nominal derivatives, in *-ija-*. None of these present formations occurs in Slavonic. As we saw, the present in *-ā-* has old root-stress. The same applies to the corresponding infinitive in *-yti*, as it only stresses the *y* if the preceding syllable has a short or circumflex vowel, i.e. in cases where de Saussure's law was bound to operate: *ródo, ródyti* : *māto, matýti*; *bañdo, bandýti*. In Slavonic we find the same state of affairs: the infinitive is root-stressed only where the root-vowel is acute: *\*prāviti* but *\*nošq̃* : *\*nòsīši* : *\*nosīti*; *\*rod'q̃* : *\*rodīši*, *\*rodīti*. Here the infinitive may have adapted its ictus to the present (p. 19). The possibility also exists that in verbs in *-ā-* : *-īti-* this may have taken place in Lithuanian (before de Saussure's law), although this process cannot have taken place here in all the long-vowel derivative types.

In verbs in *-āti-* we find in Slavonic the same agreement with the older (proto-Slavonic) present stress: *\*plāčq̃, plāčēši* : *\*plākati*; *\*dělajq̃* :

*\*dělati* but *\*pīšq̃, \*pīšēši* : *\*pisāti*; *\*smějō se, \*smějēši se* : *\*smijāti se*; *\*pytāq̃, \*pytājēši, \*pytāti*.

Comparison with Lithuanian is complicated by the fact that both *-uoti* and *-oti* may correspond to Slavonic *-ati*. Furthermore, these infinitive stems in Lithuanian never correspond to present stems in post-consonantal *-ie/o-*. In verbs with a present in *\*-āje-*, *\*-ōje-* the accentuation of the infinitive agrees with that of the present both in Baltic and in Slavonic.

In verbs in *-ēti*, too, the stress of the infinitive in Slavonic agrees entirely with the present (in *-ěje-* and *-i-*). In Lithuanian this agreement in the *i*-verbs has not always existed, cf. Daukša: *mýlīs, nórīs, pavydīs, sėdīs, stovīs, vėidīs* as opposed to *mylėti, norėti, pavydėti, sėdėti, stovėti, veizdėti*. There were infinitives both with root-stress and suffix-stress regardless of the accentuation in the present.

As the complete accentual agreement between the present and the derived infinitive in Slavonic may be secondary, and is most probably to be explained in this way (page 19), a comparison between Baltic and Slavonic is not very fruitful on this point.

Thus, comparison between the Baltic and Slavonic verbal system in relation to accentuation is a difficult chapter, owing to the not inconsiderable difference we find between the two systems. Nevertheless our comparison has shown certain highly characteristic agreements, and has brought to light no definite contrast of importance.

#### VIII. NEO-ACUTE

As we have shown above, we come across certain real metatonies in proto-Slavonic, i.e. instances of change of intonation in a stressed syllable:

In two instances we have noticed the transformation from circumflex to acute («*metatonie rude*»), viz.:

1. In the comparatives: cf. Russ. *до́рог* : *до́роже* = Čak. *drāg* : *drāže*, which goes back to proto-Slavonic *\*dořg̃* : *\*dōrže*. I have not been able to discover any explanation.

2. In the second element of a nominal compound, cf. Russ. *сѡпом* but *носѡпом*, Serbo-Croatian *goldŏvrat, zŏvrat*. This is due to the special conditions applying to the second element of a compound, cf. Norwegian «*piker*»: «*smāpiker*».

For a possible third case (iterative *\*vōrŏati*), see p. 174.

We also find certain cases of change from acute to circumflex. In proto-Slavonic I have found the following:

1. Circumflex for acute in mobile words, viz.:

a. Nouns of the type \**sŷnъ*, \**nāgъ*, accusative \**golvg*, including participles of the type \**dālъ*, \**dānъ*, \**lilъ*, \**litъ* and supines of the type \**dātъ*.

b. Verb-forms of the type Aorist \**pāde* from \**pāsti*, \**bŷstъ*, \**dāstъ* from \**bŷti*, \**dāti*.

This «metatony» is analogical (see pages 10 f).

2. Circumflex for acute in the genitive plural: \**kōrva* : \**kořvъ*. This metatony is probably due to the shortening of the genitive ending \*-*om/n*. (page 96).

3. Circumflex where we should have expected an acute in certain formatives: the stem-vowel *-i-* in *i*-presents, and the stem-vowel *a* (*ě*) in the perfect participle passive in *-anъ* (*-ěnъ*). We are reminded here of the Lithuanian circumflex in the verbal suffixes *-ā-* and *-ē-* (*sāko*, *sūko*, *vėdė*), and the question arises whether we are here dealing with a common Balto-Slavonic phenomenon, which, however, in Baltic cannot be demonstrated where most required, viz. in the *i*-presents, as these have a short *i* in Baltic.

Neo-acute, on the other hand, is not due to metatony. Its origin seems in principle to be quite clear: it is due to retraction of ictus, and the vowel which acquires a neo-acute was thus previously unstressed and had no intonation. In sifting a great mass of Slavonic material we have discovered nothing to necessitate the assumption of a difference of intonation in unstressed syllables in the periods we are here dealing with.<sup>126</sup>

We shall now review the various instances of neo-acute, and try to classify them.

#### a. Retraction from stressed semi-vowel.

1. Nom.-acc. sing. in nouns: \**kōrl'ъ* (gen. \**korl'ā*), \**kōnъ* (gen. \**koñā*), etc.: Russ. *король*, Russ. dial. *кoнь*, Serbo-Croatian (Čak.) *králj*.

2. Gen. pl. of mobile and columnally suffix-stressed words: \**gólъъ*, \**žēnъ*, \**vólъъ*, cf. Čak. *gláv*, *žen*, Russ. *головъ*, *волосъ*.

3. The present of athematic verbs \**dāmъ*, \**dāstъ*, \**ěstъ*, cf. Čak. *dán*, *dáš*, *dá*, pl. *dāmō*, *dā(s)tě*.

4. Originally end-stressed case forms, cf. loc. pl. \**volsěxъ* < \**volsěxъ*, Čak. *vlāsih*.

5. Originally end-stressed personal forms: \**sědītъ*, \**sědětъ*, \**sōtъ* < \**sēdītъ*, etc.; Čak. *želi*, *želé*, *sú*.

6. In derivatives of end-stressed and mobile substantives such as \**gólъъka*, \**nōžъka*, \**rōčъka*, Čak. *glávka*, Russ. *головка*, Czech *hlávka*, *roučka*, Pol. *główka*, *raczka*; Russian dial. (Tot'ma) *nōška*, *vōtka*. One is entirely justified here in assuming a suffix *-ika*; cf. Lith. *rankikė*, *mergikė*, *barzdikė* (though these are admittedly *īē*-stems). In a parallel way I explain

*ножницы* (Rjazaň) as developed from \**nožnica*; *ночник* (ibid.) from \**postinikъ* (cf. *постъ*, *-ā*), *дворник* from \**dvorinikъ* (cf. *дворъ*, *-ā*). Similarly Kajkavian *ženski* (Ivšić, Ljetop. 48, p. 72) < \**ženisk-*.

I also assume retraction from stressed semi-vowel in Russian dial. *прошъба* (Rjazaň)<sup>127</sup>, cf. *прошъ*; and *польза* can probably be explained in the same way: in *нельзъ*, dialect *нельгъ*, we find end-stress, but in the fixed compound with *po* retraction has probably taken place: \**po-lŷzā* > \**polŷza* > *пользъ*, cf. our explanation of *помню* (p. 152 f).

7. In the definite form of the columnally end-stressed adjectives we find \**bělъjъ* < \**belъ-jъ* in spite of *ъ* in the next syllable: Čak. *bělŷ*, Czech *bílý*, Russ. *белый*.

#### b. Retraction from medial or final circumflex.

1. Present forms of *i*-verbs (type *b*), apart from the 1st person singular: \**l'úbŷi*, \**l'úbŷtъ*; \**nōsiŷi*, \**nōsŷtъ*, etc., cf. Čak. *pálŷ*, Russ. dial. *носишь*, etc. By analogy this accentuation has spread to the columnally suffix-stressed *e-* (*ie-*, *ne-*) verbs: \**píŷeŷi*, \**tōneŷi*, \**jědeŷi*, cf. Čak. *píŷeŷ*, Russ. dial. *тонешь*, Old Russ. and dial. *идеишъ*. — 3. p. pl. \**piŷōtъ* < \**piŷōtъ*, etc., is regular.

2. The perfect participle passive in *-an-* from verbs in *-āti*: Čak. *písān*, Russ. *писанъ*. In the same category we can probably place the participles in *-ēn-* from verbs in *-ēti*, O. Russ. *не вельно*.

Forms in *-en-* from recessive *i*-verbs and *e*-verbs: Čak. *páljēn*, *měljēn*, have probably acquired their accentuation by analogy from the verbs in *-āti* (*-ēti*).

3. Loc. pl. in *-ěxъ* from columnally end-stressed *o*-stems: \**sōdēxъ* \**dvōrēxъ*, Čak. *brēstŷh*, Old Russ. *на двѣрехъ*.

4. The nom. sing. of certain stems in *-iā*, type \**vōl'ā*, Slovincian *vùolā*, Old Polish *wolā*, Russ. dial. *воля*, Czech. *vůle*, Slov. *vólja*. The long *-ā* in Lekhite indicates old contraction. The neo-acute can be explained if we assume retraction from a falling contractional vowel.

This phenomenon has continued right up to the period of the separate languages:

5. In definite adjective forms: \**bēla-jego* > \**bělāgo* > \**bēlago* — cf. Čak. *bělōga*, Russ. *белого*, \**molda-jego* > \**moldāgo* > \**mōldago* — cf. Čak. *mlādōga*.

6. In contracted present forms: \**pytājeŷi* > \**pytāŷi* > \**pytaŷi*, cf. Čak. *pitaŷ*.

7. In Serbo-Croatian in the contracted instr. sing. of the personal pronoun: Štok. *tōbōm*, Čak. *tōbūn* (cf. Russ. *мобѣю*).



8. This kind of neo-acute is possibly present in Serbo-Croatian *krénūt*, but here analogy with other participial formations from verbs of the recessive type may be responsible.

In the separate languages, we also find certain instances of retraction from vowels other than semi-vowels and falling vowels being accompanied by neo-acute in the new ictus syllable.

In view of the fact that we find Russian *умерѣть*, Serbo-Croatian *umrijeti* besides Serbo-Croatian *mrijeti*, it may be assumed that the development was *\*umerti* > *\*umerti* > Russ. *\*умерѣму* > *умерѣть*, Serbo-Croatian *\*umrijeti* > *umrijeti*.

In Čakavian we find neo-acute where the ictus of the infinitive is retracted from an *-i* which subsequently disappeared: *kljēt*, *trést*, etc.

In Russian we find in Tot'ma imperatives such as *stôj* < *\*stoji*.

In Čakavian we find as gerunds *pekúc*, *trěsúc*, *želéc*, to which Štokavian *pletúci*, *trěsúci* < *\*pletúci*, *\*trěsúci*, with circumflex due to neo-acute, correspond. Cf. Štok. *želéci* and Old Russian *исцѣлѣу*, *трасѣу*, *стояу*.

We shall now consider a few instances of neo-acute occurring in one or several of the separate languages which demand a more detailed discussion.

1. Formations in *-je*. As we know, Slavonic has a number of formations with the suffix *-je*, both derivatives from nouns (collectives and abstracts), and derivatives from verbs (nomina actionis).

Turning first to the nominal derivatives, we shall find that in the separate languages these have the ictus partly on the root-syllable, partly on the final syllable.

a. Derivatives from root-stressed nouns are root-stressed: Čak. (Novi) *zdrávji* (*zdrávljē*), Štok. *zdrâvlje*, Slov. *zdrâvlje*, Russ. *здоровье*. I do not agree with Lehr-Splawiński (O prasl. metatonji, p. 25) and van Wijk (Intonations-systeme, p. 98), that in this case we should assume a proto-Slavonic «neo-circumflex».

In North Čakavian we have here the special Čakavian rising tone which is a continuation of proto-Slavonic neo-acute. The Russian word *здоровье* also indicates rising tone (acute or neo-acute). But how can we explain the presence in North Čakavian of the representative of neo-acute? Has the old acute (cf. Novi *zdrâvi* adj.) become neo-acute through metatony? If this were the case it would be a unique example. But what we have to deal with is something different. In Štokavian the rule applies that: «Vor dem Formans *-je* = altem *-je* wird die unmittelbar vorhergehende Silbe gedehnt.» (Leskien, Serbokr. Gramm. p. 201). The same rule applies in Čakavian, as we can see e.g. from Belić's material from Novi. However, it does not seem to apply absolutely. Nevertheless it is obvious that «neo-

acute» in Čakavian *zdrávji* has arisen owing to secondary lengthening in this formation of the already-shortened «old» acute, which at that time must still have been rising and exhibiting the same melody as the short neo-acute: *\*zdôrvje* (Russ. *здоровье*) produced Serbo-Croatian *\*zdrâvlje*, lengthened to *\*zdrâvlje* > Čak. *zdrávji*. In Štokavian we find circumflex, which may go back to neo-acute, or else the short vowel may at the given time, when lengthening took place, already have become falling<sup>128</sup>.

b. Derivatives from non-root-stressed nouns have either a) end-stress, or b) root-stress with neo-acute.

a. Serbo-Croatian Štok. *vesélje*, *pérje* (besides *pêrje*). Cf. Posavina *veseljē* (Mag. mala, Varoš, Odvorci)<sup>129</sup>. The rising intonation in *-ē* shows that the accentuation was originally *\*veseljē*. Čak. *kamení* confirms this.

β. Čak. (Novi) *veseljī* (which cannot be identical with Štok. *vesélje*), *pérjī*, *Primórjī*, *prútjī*, cf. Kajk. *zělje*, *grôbje* (Ivšić, Ljetop. 48, p. 72), Štok. *gvôžđe*, *glôžje*, *rôblje*, *snôplje*, *dûblje*, *zvjêrje*, *lišće*, *grânje*, *kâmênje*. The falling vowel in Štokavian can be explained as in *zdrâvlje*. In Čak. (Novi) *pérjī*, *veseljī*, *primórjī* neo-acute *e* and *o* appear as long, i.e. the short rising (neo-acute) vowel has been lengthened. To this category belong Slov. *pérje*, *snôpje*, *grôbje*, *dôbje*, *glôžje*, *bâzje* and *bázje*,<sup>130</sup> etc.; furthermore Russ. (pluralised) *деревья*, *каменья*, *коренья*, *листья*, *зубья*, *сутья*, etc. The singular form has been preserved, e.g. in North Gr. Russ. *kaménjo*, *volósjo*, *kolósjo*, *korénjo* (Jeremin, Novgor. gub. Sborn. 99, 5, p. 30).

As the suffix *-jē* retains its end-stress, cf. Štok. *vesélje*, the words in group β cannot originally have been end-stressed, but I cannot find any objection to the explanation that they were originally stressed on *-b-*, i.e. a suffix *-jē*<sup>131</sup> (Cf. also Dolobko, Slavia V, p. 709). With regard to the contrast *\*veseljē* and *\*vôl'ā*, see page 58 f.

We find the same groups in the derivatives from verbs.

a. Derivatives from root-stressed verbs with polysyllabic infinitives retain the root-stress and the acute: Serbo-Croatian *prâvljēnje*, Čak. *čitânjī*, Old Russian *чтѣленіе*, Uč. i chitr. 52b.

b. Derivatives from verbs with the stress on *-ati*, *-ěti* in the infinitive retain this accentuation: Štok. *imânje*, *pisânje*, *sjeđenje*; Russ. *nucânie*. We find the same state of affairs in Russian in verbs in *-iti* and in *e*-verbs with marginally end-stressed present: *пrouиѣние*, *рождѣние*, *перѣние*. The same is usually the case in Serbo-Croatian: *lômlijenje*, *gûbljenje*, *nôšenje*, *plétjenje*, *těčenje*; Čak. (Novi) *govorénjī*. (The Čak. «neo-acute» can be explained as under 1 a). But occasionally we find old end-stress: Štok. *rođenje*. Beside *imânje* (das Haben, Vuk) we find *imánje* (die Habe). Similarly in Posavina we have *pečénjē* (Slobodica), *kršténē* (Varoš), and in Slov. *učenje* (< *\*učenjē*), *rojénje*, *nošénje*, etc.

c. In derivatives from monosyllabic stems ending in a vowel we find either end-stress or root-stress with neo-acute.

a. End-stress: Štok. *znánje*, *piće*, *bíce* (fortune), *klánje* (slaughter), and similarly also in verbs which have become monosyllabic secondarily: *zvánje*, *bránje*, *pránje*, *tkánje*. Posavina *pičē* (Magača mala, Slobodnica), *brānē* (Slobod.), *zvānē* (Matkovića mala), *prānē* (Varoš), agree with this. We are here dealing with a Serbo-Croatian neo-acute in the contracted suffix, which must have arisen from \*-ijē. Russ. *путѣ*, *жутьѣ*, *вранѣ*, etc., agree with these forms as far as stress is concerned.

b. Root-stress and neo-acute: Čak. (Novi) *piće*. This type I consider arose from \*pitbje, etc. (see above).

2. Adjectival formations in -bj- from nouns with non-acute root vowel.

Possessive adjectives in -bj- in Old Russian sometimes show traces of neo-acute in the stem. Thus, according to Vasiljev, Kamora p. 46, we find in the Sof. Sborn. (XVIth cent.) *в кѣзіахъ*, but *бѣжыѣ*; in the Psalt. (XVIth cent.) *кѣзіиѣ*, but also *кѣзіихъ* and *бѣжии*. In the Rjazań dialect we find *бѣжииѣ*, *кѣзииѣ*.

The forms we find in the other Slavonic languages, such as Slov. *kôzji*, *ôrlji*, *ôsjj*, *ôvčji*, *ôvjji*, *sokôljji* (Pleteršnik), as opposed to *bôžji*, *kôblji*, *kôzljji*; Kajk. *bôžji*, *kôzji* (Ivšić, Ljetop. 48, p. 72) are «long» forms. Obviously there existed not only root-stressed «long» forms with neo-acute root-syllable, but also suffix-stressed forms, cf. Čak. (Novi) *kôzji*, *bôžji*, but *ovčji*, *vražjā*. These are the two regular types of definite adjective in Slavonic where the short form in the nom. sing. masculine was not stressed and acute.

3. Comparatives. As mentioned on page 105, the comparative in proto-Slavonic shows «metatonic rude». In short vowels we find in Czech and in Russian dialects the lengthening which suggests neo-acute: Russ. dial. *бѣле*, Old Czech. *gŭře*. Here it is possible that the short vowel has undergone the same metatony as the long vowel in \**dôrže*, etc., in other words that we are dealing with a neo-acute which is due to real metatony, and not to retraction. This, however, is not conclusive, as the rising intonation in \**bôl'e*, \**môl'e* may be due to analogical influence from \**dôrže*, \**môld'e*, etc., after the rising short vowel, through the laws of retraction, had been made possible in the first syllable. It is also possible that lengthening of the short vowel, under the influence of a long, formerly acute vowel (cf. \**sŭše*, etc.), took place in languages where the old acute retained its length longer than the circumflex, but after the intonations themselves had disappeared.

4. Lengthening of short rising final vowel in the separate languages.

In section 1 we saw examples from Serbo-Croatian of neo-acute which had arisen as a result of lengthening of the shortened «old acute» at a time when this short vowel was still rising. This applies to such instances as Čak. *zdrávji*. Similar lengthenings occur, as we saw p. 38 f, in certain case endings in the separate languages: Čak. (Novi) *imenā*, *nebesā*, Posavina *poljā*, *imenā*. Van Wijk is clearly wrong when he states that this is a case of metatony acute > neo-acute. What has in fact happened is that a shortened stressed final vowel (rising, like all stressed final vowels) has been lengthened in a separate language, and has thus coincided with the long neo-acute. As we saw, lengthening in the instrumental plural is more widespread, though I would not go so far as to maintain that this is proto-Slavonic.

5. Neo-acute in connection with contraction in the separate languages.

As we have seen, in the separate languages length often arises from contraction. If the second vowel had ictus, the result of the contraction is a rising vowel, which in the Serbo-Croatian dialects where the neo-acute has been preserved as a separate intonation, appears as a neo-acute: Čak. *kamenī*, Posavina *veseljē*; Čak. (Novi) instr. *gorún*, inf. *stāt* < \**stojāt*, etc.

Thus, in all the examples I have found, a proto-Slavonic neo-acute can either be considered as secondary, or has arisen as a result of retraction of the ictus to one syllable from the following syllable.

## IX. RETROSPECTIVE GLANCE AT INDO-EUROPEAN

The path we have traced through the world of Slavonic grammar and the digressions we have made into Baltic, have shown that close agreement on many points exists between the two groups of languages.

It seems that the basis for the two old intonations — acute and circumflex — is the same in both groups of languages. De Saussure has established this basis in Baltic. It consists, apart from auslaut, in the contrast between long vowel and long diphthong on the one hand, and short vowel and short diphthong on the other. Subsequently the difference in melody which existed between these two categories has been phonologised owing to the appearance of new, acute short diphthongs when \**a* disappeared in a medial syllable, and further owing to the shortening of the long diphthongs, and to metatony. Short vowels originally had no difference in intonation: in Slavonic they were falling in the first syllable, but otherwise rising;

in Lithuanian they always had the same melody as long circumflex vowels.

Long vowels in auslaut have been shortened in proto-Slavonic, so that we cannot observe the old difference of intonation here.

The origin of the difference of intonation in final syllables in Baltic is outside the scope of this work.

Both in proto-Slavonic and Baltic we find in some cases an intonation other than we had expected. Some of these might be common to Baltic and Slavonic.

I am thinking of iteratives of the type *\*vōrīati*, Russ. *ворю́сь*, cf. Lith. *lándžioti*. I mention this case because the other accented forms from the root *\*uert-* are circumflex (apart from the type *noeopóm*).

I am also thinking of the circumflexion of the long vocalic present suffix in proto-Slavonic *\*nosī-* (> *\*nōsī-*), cf. Lith. *sāko*, *sūko*, *vėdė*.

Both Baltic and Slavonic know two accentual types in inflexion:

1. Fixed columnal stress, which may be placed on any syllable.

2. Mobile stress, which alternates between first and last syllable with skipping of the intermediate syllables.

In the verbs, however, the last-mentioned type in Slavonic has given way to (marginal) end-stress, except probably in the 1. p. sg.; in Lithuanian the mobile stress has given way to fixed stress on the first syllable or another non-final syllable.

The distribution between root-stressed and end-stressed cases in the mobile noun declension agrees very closely in Slavonic and Lithuanian, so that a common Balto-Slavonic basis must be assumed. By «Balto-Slavonic» I mean not an absolutely homogeneous language, but a dialectal area which is so homogeneous that it is capable of carrying through common linguistic changes, which either cover the entire area, or else only reach part of it (cf. NTS XI, p. 85 f). In Lithuanian, however, the columnally end-stressed words have joined the mobile class. In Prussian it seems that columnal end-stress still existed, but owing to the paucity of available material it is difficult to confirm this with any certainty.

Differences in the placing of the ictus between proto-Slavonic and proto-Lithuanian arose primarily as a result of the laws of displacement of ictus which came into operation within each of the two languages: in Lithuanian de Saussure's law, and in Slavonic the laws of retraction of the stress. The Slavonic laws of retraction consisted in:

1. Retraction from a non-initial stressed falling vowel.
2. Retraction from a stressed semi-vowel.

As a result of this, a third intonation arose in Slavonic, viz. neo-acute.

How does the picture we have tried to draw of the Balto-Slavonic accentual system agree with what we know of Indo-European accent?

I have not dealt with the question of Indo-European intonations in this book, as this in my opinion has no direct bearing on Slavonic. Furthermore it is doubtful whether sufficient material is available to allow any definite conclusions to be reached on this subject.

For a study of the ictus a good deal more material is available: we have the free accent in Vedic, the partly free accent in Greek, and in Germanic such indications as Verner's law is capable of giving us.

As far as the relationship between the Balto-Slavonic stage which we have here tried to reconstruct, and the state of affairs in Sanskrit and Greek, is concerned, the following points may be noted:

1. Balto-Slavonic mobility consists in an alternation between the first and last syllable. In Sanskrit we find an alternation between the penultimate syllable and the last in the type: *bṛhán*, *bṛhántam* : *bṛhatáh*, *bṛhaté*; *pratyán*, *pratyāñcam* : *praticáh*. In Greek we find *γυνή*, *γυναῖκα* : *γυναῖκος*. But the principle we find in Balto-Slavonic is in fact not unknown to Sanskrit and Greek, as has often been pointed out (Meillet and Boyer, MSL VIII, p. 172 ff; Meillet MSL XIII, p. 110 ff, Introduction, p. 316 ff; Bally, *Mélanges de Saussure*, p. 3 ff, and others). In Sanskrit we find an alternation between the first and last syllable in *púmān*, *púmāmsam* : *pumsáh*, to which, in the light of Kurylowicz's interpretation (Accentuation, p. 15), we may add *pánthāh*, *pánthām* : *patháh*, *pathé* (< *\*pónteH* *\*pónteHm* : *\*pntHé/os*, *\*pntHéi*). In Greek this type of mobility is present in (Ion.) *ῥογνία*, *ῥογνίαν* : *ῥογνίης*, *ῥογνίῃ*; cf. Liddle and Scott, *Lex.* 2 ed. 1940 (cf. *μία*, *μίαν* : *μῆς*). To this group, as Meillet and others have maintained, *φρυγανῖα* (originally root-stressed) : *φρυγανῖος* also probably belong. This principle of accentuation must in fact also be recognised as being of Indo-European origin. The part played by the two types of mobility *bṛhántam* : *bṛhatáh* and *púmāmsam* : *pumsáh* in the basic language is not a question I shall deal with here.

There is an unmistakable relationship between the Balto-Slavonic and the Greek and Vedic mobility with regard to which cases are end-stressed, and which are barytonised:

Sanskrit <i>pāt</i>		Russ. <i>сторона́</i>
<i>pādam</i>		<i>сторо́ну</i>
<i>padāh</i>		<i>сторонь</i>
<i>padé</i>	Gr. <i>ποδί</i> ?	Older Russ. <i>стороне́</i>
<i>padā</i>		<i>стороню́</i>
<i>padí</i> but <i>kṣāmi</i>	<i>ποδί</i>	<i>сторонé</i>
<i>pādau</i>		Slov. <i>gubē</i>
<i>pādaḥ</i>		<i>стороны́</i>
<i>padāh</i>	but <i>πόδας</i>	<i>стороны́</i>
<i>padām</i>		<i>сторон</i>
<i>patsú</i>		<i>(сторонáx)</i>

2. A contrast which I have not been able to explain, is to be found in the fact that the dative singular is root-stressed in Balto-Slavonic, but end-stressed in Greek and Sanskrit.

3. The nominative singular in the mobile type is end-stressed in Balto-Slavonic: proto-Slav. \**golvā*; acc. \**golvq*; Lith. *duktė* : *dūktėrī*, *piemuō*, *akis*, *sūnūs*, *aiškī*. In Sanskrit and Greek the nom. sing. is root-stressed in this accentual type, Sanskrit *pūmān*, *pānthāh*, Greek ὄρνυα. Kurylowicz (Int. et morph. p. 8 f, Accentuation, p. 201 f) is of the opinion that this is one of the proofs that the Baltic and Slavonic mobility cannot genetically have arisen from the accentual type which is represented by Sanskrit *pānthāh*, etc. He is of the opinion that we must take as our basis the columnal accentual type: \**dukt'ē*, \**dukt'erī*, \**duktr'es*, \**dukt'eres*, etc., cf. Sanskrit *pitā*, *pitāram*, *pitūh*, *pitré*, Greek πατήρ, πατέρα, πατρός, πατρί. Balto-Slavonic mobility, according to this theory, must have arisen as a result of phonetic retraction of the ictus from a medial, stressed short or circumflex vowel (\**duktērī* > *dūktėrī*). As I stated on page 13, I find no basis to assume a sound-law of this kind in Baltic. In Slavonic we find retraction from a medial, circumflex vowel, but then the new stressed syllable acquires neo-acute. I believe, therefore, that we must accept the idea that a change has taken place in the nom. sing. on one side or the other, viz. either a change in accentuation or a generalising of one of two methods of accentuation.

That the root-stressed nominative is no innovation in Sanskrit and Greek is suggested by the vowel gradation: Greek ὄρνυα, ὄρνυαν : ὄρνυις, ὄρνυϊ show 0-grade (\*-yā, \*-yān/m) in unstressed syllable, normal grade (\*-yās, \*-yāi) in the stressed syllable. Sanskrit -ī, -īm : -yāh, -yai agrees with this. Admittedly the quantitative ablaut is early proto-Indo-European, and in later changes of accent or later word formations within the basic language it plays no role. But the exact agreement between accent and vowel grade in the formations we have here mentioned suggests that both are old.

On the other hand it is possible that Slavonic and Baltic, too, may have known root-stress in the nominative. In Russian dialects we find *gōru* beside *gorū* (Vasmer, Etym. Wb.) This may of course be due to the influence of the oblique cases. But Old Prussian has *dukti* (2x in Enchir.), which suggests root-stress, as stressed -ē is retained as -ē, cf. *semē*. Slavonic mobile neuters are root-stressed in the nom.-acc. sing., cf. Russ. слово, имя, поле.

But whatever the explanation may be, this contrast cannot, any more than that between Slavonic dat. \**golvē* - Lith. *gálvai*, Slav. \**zōbu* - Lith. *zāmbui* and Greek ὄρνυϊ, Sanskrit *padé*, allow us to reject the connect-

ion between the Balto-Slavonic and the Greek-Vedic accentual paradigms. Even between Baltic and Slavonic such contrasts are to be found, as in the nom. pl. masc. Cf. Lith. *minkšti*, *kelmai*: Russ. бѣлу, etc.

4. We find mobility in all stem-types, including the vowel-stems. Among the other Indo-European languages, only Greek in a relic (ὄρνυα : -ις, etc.) indicates that mobility could occur outside the consonant-stems. But the idea that the vowel-stems, including even the *o*-stems, could be mobile in Indo-European, is not a new one. As far as the arguments which have been adduced in favour of this are concerned, I attach less importance to the instances we have of ablaut difference within otherwise similarly formed vowel stems, such as Latin *verbum*, Lith. *vardas*: Prussian *wīrds*, Gothic *waurd*; Old Norse *svefn*, Lith. *sāpnas*, Sanskrit *svāpnah*, Latin *somnus*: Slavonic *sōn*. Though I believe that quantitative ablaut was originally related to accent, this phenomenon is early proto-Indo-European, and without importance for later proto-Indo-European formations.

Nor is decisive proof furnished by the contrast between Sanskrit *dākṣiṇah*, *uttarah* and the adverbial forms *dakṣiṇā*, *uttarāt*. It is possible that these adverbial formations go back to forms which were separated from their original paradigms as early as the time of the basic language, and consequently prove no mobility or end-stress during the last stage of this language. It would appear that in Indo-European there were adverbial and pronominal formations with accented *e*-grade as opposed to barytonised forms in the nominal paradigm (cf. Gothic *hvaþar*, *hvaþro* : *hvaðre*.)

I consider that a more important argument is afforded by the contrast in Germanic between the voiced and voiceless spirant in a great many cases, cf. Gothic *bloþa*- : Old Saxon *blōd*; Gothic *kasa*- : Old Norse *ker*. It is noticeable, however, that here neuter words provide the great majority of sure examples, and it is possible that there was an old contrast between \**kāsa* and nom.-acc. pl. \**kazō*, which need not necessarily be interpreted as old mobility, as the nom.-acc. pl. N was formed from another stem than the other forms. For the problem of mobility in pre-Germanic generally, see Barber, Die vorgeschichtliche Betonung der germanischen Substantiva und Adjektiva.

Besides the scattered signs adduced to support the assumption of a mobile accentuation outside the consonant-stems, we have the evidence which the Baltic and Slavonic languages provide, and which cannot be explained on a Balto-Slavonic basis. The influence of consonant-stems cannot be assumed, first and foremost because only one group of words in each stem-type is mobile. Why should precisely these have been influenced by the mobile consonant-stems? I believe that mobility goes back

to Indo-European. Its disappearance in Sanskrit and Greek would more or less correspond with what we find even in the consonant paradigms, where in words whose nom. sing. has more than one syllable we likewise find only a few instances of mobility in Sanskrit and Greek. Sanskrit and Greek largely confine mobility to words with monosyllabic forms in the nom. sing. Polysyllabic consonant-stems as a rule have no mobility, as opposed to Lithuanian. From one point of view the *o-*, *ā-*, *i-* and *u-*stems can be classed with the latter: normally their nom. sing. has more than one syllable. Elimination of mobility is a possibility both in these stems and in the consonant-stems. Meillet MSL XIX, p. 74, states clearly what I consider to be the solution: «L'existence d'un type Mob. opposé à un type Im. — ou plutôt à deux types Im., l'un baryton, l'autre oxyton — telle qu'on l'observe en slave et en baltique, — repose sur un état i-e. à peu près semblable, ainsi qu'on l'a noté MSL VIII 172 et suiv., car les faits baltiques et slaves ne sauraient s'expliquer par un développement récent, tandis que, en revanche, l'état de chose grec s'explique bien en partant d'un état pareil en gros à l'état slave.» Meillet does not, however, believe in mobility in thematic stems. On this point I disagree with him.

5. A contrast to Sanskrit (Greek throws no light on this problem) is formed by the accentuation of the thematic verbs apart from those which are stressed according to the schema *tudāti*. In Slavonic we must assume a root-stressed and a marginally end-stressed type<sup>132</sup> as opposed to the fixed stress on the root syllable which we find in the type *bhārati* in Sanskrit. In Baltic the type corresponding to the Slavonic type (c) has stress on the first syllable. It is probable that in Baltic and Slavonic we must assume an original mobility in most of these verbs. This would agree with the principles for Slavonic and Baltic nominal accent, which knows no marginally end-stressed forms in a word, unless at the same time within this word we also have forms with ictus on the first syllable. The originally mobile athematic root-verbs, too, have become marginally end-stressed in Slavonic.

In Sanskrit within the athematic verbs with a polysyllabic stem we find an alternation between the penultimate and the last syllable: *śṛṇómi* : *śṛṇumāḥ*, *juhómi* : *juhumāḥ*. The reduplicative verbs are, however, an exception; cf. *bibharmi* : *bibhṛmāḥ*, where the stress varies between the first and last syllable. Thus in the verbs, too, both forms of mobility are represented in Sanskrit. (Cf. Meillet MSL XIII, p. 114 f). The original mobility which we have assumed in Balto-Slavonic in verbs of the type *bhārati*, provides, however, a decided contrast to Sanskrit. But I do not deny the possibility that this Balto-Slavonic mobility may be of Indo-European origin. In Germanic, in some of these verbs, we find a difference

between the separate languages with regard to the question of voiced or voiceless spirant: Gothic *weiḥan* : Middle High German *-wīgen*; Gothic *-hlaþan* : Anglo-Saxon *hladan*; Gothic *þreiḥan* : Old Norse *þryngva*; Gothic *hahan* : Old Norse *hanga*.

## X. CONCLUSIONS

These investigations have led me to the following conclusions:

1. De Saussure's law did not operate in Slavonic.
2. The neo-acute is not due to metatony but to a retraction of the stress from a semi-vowel or from a non-initial vowel with falling intonation.
3. The neo-circumflex did not belong to the proto-Slavonic period.
4. We find 3 proto-Slavonic intonations:
  - a. Acute, which can occur on any syllable, and which keeps its stress constantly throughout the paradigm.
  - b. Neo-acute, which can occur on any syllable, provided that other forms of the paradigm or the etymological group concerned have stress on the subsequent syllable, and provided also that no skipping of syllables ever takes place in the process concerned.
  - c. Circumflex, which occurs on the first syllable when other forms of the paradigm have the stress on the last syllable.
5. All — nominal and verbal — paradigms could be:
  - a. immobile with α) the stress on the first syllable or β) the stress on a medial syllable. The stress was retracted from a circumflex vowel in a medial syllable and — in verbs — analogically from *-e/-o-*. The new ictus syllable received neo-acute.
  - b. mobile with stress in some forms on the first syllable, in others on the last, skipping the medial syllables. In the verbs few traces of mobility survive. In most forms stress has analogically been transferred to the last syllable.
6. The mobile nominal paradigms of Slavonic are closely related to those we find in Baltic. The immobile type with the stress on the last stem syllable, which in some cases coalesced with the ending, has disappeared in Lithuanian.
7. In the Slavonic paradigms:
 

Acute intonation was characteristic of the paradigms with constant root stress. Neo-acute was characteristic of paradigms with recessive stress in certain forms. Circumflex was characteristic of paradigms with mobile stress.

## NOTES:

<sup>1</sup> The third possibility, viz. to regard \*synъ, \*zvъrb, \*nâgъ \*živъ as both nominative and accusative, and to assume an original final stress throughout the paradigm, does not arise, as the words with which we are concerned are mobile in the living Slavonic languages: Russian *жѣво*, *нѣго*, Old Russian *дѣры*, etc.

<sup>2</sup> Intonation et morphologie en slave commun, Roczn. Slaw. XIV, p. 1 ff; L'accentuation des langues indo-européennes, p. 193 ff.

<sup>3</sup> Kuryłowicz is supported by Lehr-Splawiński, Sprawozd. Polskiej Akad. Umiejętności XXXVIII, No. 2, p. 6 ff. On the basis of a systematic examination of the Slavonic material, he maintains that old stressed long vowels had circumflex.

<sup>4</sup> My argument also applies to Torbiörnsson's theory; he uses the terms "akzentuell offene Silbe" and "akzentuell geschlossene Silbe". In the first type the ictus is according to him retracted (Die litauische Akzentverschiebung und der litauische Verbalakzent).

<sup>5</sup> I agree in the main with the criticism of Kuryłowicz's theories of accent advanced by van Wijk, Arch. Phil. V, p. 23 ff.

<sup>6</sup> MSL XI, p. 345 f., Arch. f. sl. Phil. XXV, p. 425.

<sup>7</sup> Cf. North Kashubian: *rôb"oce*, *sâsada*, *čělěscě* according to Bubrich, Северно-кашубская система ударения.

<sup>8</sup> Details apart, the conclusion I have arrived at is that words in Russian-Church Slavonic texts provided with accent marks can, in general, be used as examples of genuine Russian accentuation where the words in question existed in contemporary Russian.

<sup>9</sup> Unfortunately other scholars use ~ to designate "neo-circumflex", so that in works dealing with accent this sign has two different meanings: neo-acute and neo-circumflex.

<sup>10</sup> Exceptions are present forms with retracted accent corresponding to Slov. *nôsi*, *tône*, *kôlje*. (See Ivšić, l.c. p. 72).

<sup>11</sup> Kuryłowicz, too, declines to accept the existence of a neo-acute short vowel: "Une forme comme nom.-acc. *bobъ* devient *b'obъ* avec un *o* identique à celui de *p'ol'e*". Accentuation, p. 259.

<sup>12</sup> Shortening seems to have been regular in Serbo-Croat. in front of a stressed inner acute. See p. 41.

<sup>13</sup> „Още въ пометникъ отъ XV в. намирамъ gen. pl. *гѣдинъ*". Op. cit. p. 72.

<sup>14</sup> Cf. Bulachovskij, Južnosl. fil. IV, p. 131<sup>2</sup>.

<sup>15</sup> Cf. Vondrák, Příspěvky k nauce o praslov. přízvuku (Spisi filos. fak. Univ. v. Brně V, p. 69, 1924).

<sup>16</sup> Cf. Bulachovskij, Južnosl. fil. IV, p. 126, who quite rightly draws attention to the fact that this theory "встречает и значительные затруднения: abl. s. u dat. pl. *brátom*, *gádom*, формы вроде *máter* ..., *kámen*, и может быть проведена при допущении очень большого числа аналогических образований."

Dolobko, Slavia V 692, says in regard to Slov. *lětos*: В этом словенском ѣ, для которого аналогии не придумать и которого нельзя, посему, объяснить иначе, как фонетически, я и вижу исконность. According to Bulachovskij, Južnosl. fil. V, p. 86 ff, the Slovene metatony / > ѣ also occurs before a late loaned suffix with a long vowel, such as -*avt* < Germanic *olt* and -*ov* < Hung. -*ó*.

<sup>17</sup> Cf. Vasiljev, Kamora, p. 129.

<sup>18</sup> Also in *bôudq*, *lězq* where Slovene, Kajkavian and North Čakavian have circumflex.

<sup>19</sup> The Slovincian accentuation has recently been treated by Kuryłowicz, Rocznik Slawistyczny XVII, p. 1 ff. I agree with him on many points.

<sup>20</sup> Corresponding to Russ. *ноуу* : *ноуиу* we should have \**noši*, \**núsiš*, while for *сужы* : *судуиу* we should have \**souzi* : \**soudiš*, as an old long vowel in the syllable immediately preceding the stressed syllable retains its length.

<sup>21</sup> We cannot therefore assume a metatony acute & neo-acute, as van Wijk does, Roczn. Sl. IX p. 80 f.

<sup>22</sup> The use of *â* for long *a* or "a pochyłone" I have taken from Łoś, Gramatyka polska III, p. 91 ff, where I have found my examples.

<sup>23</sup> Torbiörnsson, Die slovak. Vokalbalanze, Språkv. Sällskapet i Upps. Förh. 1919-21, maintains that -*ā*/-*a* in Slovak is due to a special Slovak tendency to avoid a long vowel in two adjacent syllables. Cf. however van Wijk's objection to this in Slavia II, p. 596 ff.

<sup>24</sup> The Slovincian quotations, unless otherwise stated, are taken from Lorentz, Slowinzische Grammatik. I have had to simplify somewhat his complicated method of transcription wherever this has been possible without creating undue confusion in the presentation of the phonological system. Thus for «crossed *u*» I have used *ū*.

<sup>25</sup> This lengthening is in no way related to Slovene neo-circumflex in locatives of the type *orêhu*. In Slovene locative endings -*u* and -*i* are short, cf. *stabrū*, *vrvi*. Cf. on the other hand instrumental plural *stabri*.

<sup>26</sup> Bulachovskij, Južnoslov. fil. V, p. 88.

<sup>27</sup> Rozwadowski's insistence that the preserved long vowels in these forms had neo-acute in Lekhite is clearly due to his system, but there is no direct evidence to support this extension of the use of the neo-acute in Lekhite.

<sup>28</sup> The stress on the preposition in e.g. Russ. *прѣдѣл* - *прѣдѣлѣ*, Serb.-Cr. *îmrije*, is not due to phonetic retraction, but is merely caused by mobile stress.

<sup>29</sup> Novi, Belić, Izv. 14, p. 189.

<sup>30</sup> The Serbo-Croatian material used in this section has been taken mainly from Leskien, Serbokroatische Grammatik, pp. 231 ff.

<sup>31</sup> Certain analogical formations and double forms occur. In the chapter dealing with conjugation, I show that the forms given here may be assumed to be the oldest.

<sup>32</sup> The *i*-verbs may be passed over as their perfect participle passive is formed with the help of -*eno*- and consequently does not have a long vowel. In the case of the *ě*-verbs these participles are rare and to a certain extent our judgment of them must be held in abeyance.

<sup>33</sup> Every linguistic unity is relative. Thus the term "proto-Slavonic", if this word is to designate a language, implies only an approximation.

<sup>34</sup> Cf. Endzelin IF33, p. 118, who, on the basis of the Latvian loan-words, expresses some doubt as to how far shortening in a stressed first syllable in polysyllabic words is common to all Slavonic languages.

<sup>35</sup> We might have expected \**kôrov*. The form has been altered on the pattern of all the other forms. There are no grounds for regarding *opô* as the regular Russian representative of a proto-Slavonic neo-circumflex.

<sup>36</sup> Slovene neo-circumflex p. 29.

<sup>37</sup> Length is due to loss of *ъ*.

<sup>38</sup> Written *klootwaa* Glog. 1 a. according to Los, Gram. I p. 104.

This form is, however, uncertain according to Grappin, Histoire de la flexion du nom en polonais, p. 206, as the text contains many "false" forms in *-aa*.

<sup>39</sup> Trávníček, Mluvnice p. 258.

<sup>40</sup> I am not taking the vocative into account here.

<sup>41</sup> At any rate nom., gen., loc. sing., gen. pl.

<sup>42</sup> Cf. Jeremin: *Опис. "Уломского" и Ваучского гов., череповецкого у., Новгород. губ.* Sborn. 99, 5, p. 25. Cf. *на сковороду-ту*, Kostromsk. uj., according to N. Vinogradov, Sborn. 77, 8, p. 65.

<sup>43</sup> Quoted from Bubrich, *Северно-кашубская сист. ударения* p. 76, and agreeing with the information given by Lorentz, Gr. p. 190.

<sup>44</sup> Čak. (Hvar, etc.) *vodón* (see Hraste: Južnosl. Fil. XIV, p. 28), Posav. *vodōm* (see Ivšić: Rad 197 p. 25), cf. Štok. *žēnōm*, seems to have arisen from *\*vodojū* through the intermediate stages *\*vodoū* > *\*vodōv*. The *-m* must be analogical.

<sup>45</sup> Cf. Russian dial. *слезамі, слезмѣ* in Civil'skij uj., Kazansk. Gub. (Sbornik otdel. russ. jaz. 99, 3, p. 26).

<sup>46</sup> Cf. Daukša: *Baznycion' tikronaion'* (Post. 403), *kaná* (pass.)

<sup>47</sup> Type b (*\*ženā, \*ženō, \*ženū, \*ženāmi*, etc.) in Slavonic.

<sup>48</sup> In Slovene, neo-circumflex occurs before a long vowel in the final syllable; the endings in the genitive and instrumental and locative plural were *\*-ōv, \*-ī, \*-ih* (see p. 29). For the locative singular with metatony, see p. 30.

<sup>49</sup> Cf. Vasiljev, Kamora, p. 58 f.

<sup>50</sup> The form *kōnjih* was vouched for by Mr. Logar, head of the Slovene dialect survey, and other Slovene scholars in Ljubljana in 1954.

<sup>51</sup> I am indebted to Mr. Logar for this explanation, which I regard as probable. Kajkavian has a neo-acute, cf. instr. loc. pl. *kōmī(h), vōlī(h)*.

<sup>52</sup> Vasiljev, Kamora 114 f.

<sup>53</sup> Vasiljev, Kamora p. 110.

<sup>54</sup> Stang, Uč. i chitr. p. 33.

<sup>55</sup> As far as the plural forms are concerned my reconstruction agrees with Kurylowicz, Roczn. Sl. 14, p. 20. In the singular he assumes end-stress apart from the accusative, for which I cannot find sufficient empirical foundation.

<sup>56</sup> This was the opinion of K. Būga, as he told me himself in the summer of 1924.

<sup>57</sup> Probably a post-position *\*en*.

<sup>58</sup> The examples are from Arumaa.

<sup>59</sup> *валы* (= *spiládes*) p. 47, *мъхѣ* p. 52 (M. Vasmer: *Ein russisch-byzantinisches Gesprächsbuch*, Lpz. 1922).

<sup>60</sup> In Kostromskoj uj. according to N. Vinogradov, Sborn. 77, 8, p. 63, 67: *два раза, к разу пришлось, одно вудь разъ до вудьно будѣт, дам разъ, как и выпутыи глаза, от шапъ было* (in a game), but *к шапу, со всево земново шапа*.

<sup>61</sup> As far as the word *iac* is concerned, this was end-stressed in all cases right up to very recent times, and is consequently a very new member of group B.

<sup>62</sup> In a review of Rešetar, *Der štokavische Dialekt*, Vienna 1907.

<sup>63</sup> Cf. R. dial. (Kostromskoj uj.) *двѣрям, двѣрях* besides *дверям, дверях*. (N. Vinogradov, Sborn. 77, 8, p. 80). In the Čudov NT, however, we find end-stress.

<sup>64</sup> It is curious that even Lith. *dūrys* — with a different vocalism from Slavonic — is root-stressed in the declension, cf. Daukša: *dūrimis, dūrisse* (see Skardžius: *Daukšos Akcentologija*, p. 116).

<sup>65</sup> Notice, however, that in Bulgarian *градѣ* is the only *i*-stem with end-stress in the nom. pl. (see Kodov, *Подвижното бълг. ударение*, p. 61).

<sup>66</sup> Slov. *sēdem, ōset* besides *pēt, šest, devēt, deset*; Russ. *сѣмьдесят, вѣсьмьдесят* besides *пятьдесят, шестьдесят* point back to proto-Slavonic *\*pētъ, \*šestъ, \*dēvētъ*, but *\*sēdmъ, \*ōsmъ* < *\*sedmъ, \*osmъ*. The two last-mentioned show original end-stress. It seems that end-stressed Slavonic numeral derivatives are derived from the numerals which were end-stressed in Indo-European, while the mobiles are derived from those that were root-stressed in Indo-European, cf. Sanskrit *pāñca, nāva, dāśa* but *saptā, aṣṭā*; Greek *πέντε, ἑννέα, δέκα* but end-stress in 7, 8; Gothic *fimf, taihun*, but *sibun*.

<sup>67</sup> In dialects in Matyr, Sarajskij uj. *бѣи, агѣи, агѣм, агѣми, бѣа ф* (Petrovskaja: *К диал. Рязанскихъ говоров*, Sborn. 99, 6, p. 39).

<sup>68</sup> In Lithuanian, too, we find incomplete transformation of this type to the mobile; thus in the literary language we have *anglis* beside dial. *aŋglis*, Zem. *anglīs*, gen. *anglīs*, but gen. pl. *aŋglių* (Būga, *Žodynas XXVII*).

<sup>69</sup> Pleteršnik.

<sup>70</sup> Valjavec, Rad. 132, p. 173. Besides this form, according to Mr. Logar, and other scholars we also find in the modern language stress on the penultimate syllable.

<sup>71</sup> Pleteršnik.

<sup>72</sup> Belić, Istorija, p. 56.

<sup>73</sup> In Bulgarian *време* is the only end-stressed *n*-stem (Kodov, *Подвижното бълг. ударение*, p. 64).

<sup>74</sup> Cf. *внѣгѣмѣ, ягнѣмѣ* in Archang. Gub. Cholmog. uj. (Sborn. 73, 5, p. 73).

<sup>75</sup> Pleteršnik.

<sup>76</sup> Valjavec, Rad. 132, p. 173.

<sup>77</sup> Logar gives *prasē*, gen. *-ēta*, pl. *prasēta, prasēt*. This paradigm must be due to a blend of types.

<sup>78</sup> In Bulgarian, words with acute root-vowel have root-stress (*ягне, яре, нѣле*), the others have end-stress: *дѣтѣ, клѣсѣ, телѣ, прасѣ*. But we have *ж(д)рѣбе* beside *ждрѣбѣ* (Kodov: *Подвижн. бълг. ударение* p. 67).

<sup>79</sup> During my stay in Ljubljana in 1954 the following forms were vouched for by various scholars: *nebō*, gen. sing. *nebā*, pl. *nebēsa, uhō*, gen. sing. *ušēsa*, pl. *ušēsa*.

<sup>80</sup> Hvar: *kolīno, kolīna* .. gen. pl. *kōlīn*; furthermore *kōpit, bēsid* besides *besid* (Hraste, Južnosl. Fil. XIV, p. 23, 26.) Further *konōba, konōbe* ..: *kōnob* (ibid.). Cf. *kōlīn* (Korčula according to Moskovljević, *Govor ostrova Korčule*, p. 45).

<sup>81</sup> Cf. Rozwadowski, Gr. jęz. pol. p. 92 f.

<sup>82</sup> At this stage I am discounting the participle, with which I intend to deal later.

<sup>83</sup> Ramovš, *Slavia II*. p. 216.



<sup>84</sup>I agree with Lehr-Splawinski, O prasłowiańskiej metatonji, p. 51, in regarding Novi golī as analogical. Cf. *dōbri* from *dōbar*, -rā, -rō besides *dobri*.

<sup>85</sup> Even if the final vowels had not yet been shortened when the definite forms were created, this need hardly make any difference as far as the possibility of contraction is concerned.

<sup>86</sup> Or \*-āgo. A circumflex was not possible in a medial syllable.

<sup>87</sup> As a third instance may be mentioned iteratives of the type \**vōrlati*, Russ. *ворлать*.

<sup>88</sup> Štokavian *zā tobōm*, *zā sobōm* (Bulachovskij, *Сборн. счameй*, 1947, p. 412) are, however, remarkable.

<sup>89</sup> The accentuation *tēbe*, *tēbē* in the Kiev Leaflets might suggest dialectal differences in the accentuation of these forms in proto-Slavonic (Trubetzkoy, *Altkirchensl. Gramm.*, p. 44).

<sup>90</sup> Cf. Kormčaja 1650: *omnyctumē* 56a, *depjctumē* 56a; Muromskij uj. *cnumē* (Sborn. 99 3, p. 4), Suzdalskij uj. *xotumē* (Sborn. 71, 5, p. 13).

<sup>91</sup> Is Čudov NT *nomnuuū* 143a a relic of this form, or simply a mistake? We find a few examples of this accentuation in the thematic flexion too: *xcuseuū* 122b, *imeuū* 64a.

<sup>92</sup> Thus Pleteršnik; Slovenski pravopis (1950) has *lėpim*.

<sup>93</sup> Forms of the type \**možb*, which we find in the 2nd and 3rd person sing. in various Slavonic languages (S.-Cr. 2nd p. *mož*, Old Czech 3rd pers. *mōž*, Czech dial. *můž*, etc.), can, I believe, reasonably be explained as recent shortenings. Church Slavonic does not have these forms. On this point I differ from Vaillant R. E. Sl. XIV, p. 26 ff.

<sup>94</sup> Ex. *prinectemē* Triod' 1621 108b; *paset'ó* (Tot'ma, Broch op. cit. s. 131), *nectemē* (-mē), Guv. Vjatka (Sborn. 73 5, p. 3).

<sup>95</sup> Čudov NT *xcuseuū* 122b, *imeuū* 64a, see p. 119.

<sup>96</sup> Some instances of retraction in the separate languages are secondary.

<sup>97</sup> The verbs *dādāmi* and *dādāhāmi* have in Sanskrit 3rd pers. pl. in -*ati* < \*-*ṛiti* with root-stress (*dādati*, *dādhati*) as against *dādmāh*, *datthā*. The root-stress in the 3rd pers. pl. seems to agree with the 0-grade in the ending, and is therefore probably old. Slavonic -*eti* may represent the same 0-grade, but its accent has then been adapted to the other plural forms.

<sup>98</sup> In the main I shall be following the pattern laid down by Leskien, Serbokroat. Gr., p. 540 ff.

<sup>99</sup> Cf. also Belić, *Istoriја српскохрв. језика* II 2, p. 181.

<sup>100</sup> Daničić, *Srpski akcenti* p. 178 f quotes, with old end-stress in the aorist: *lāgati*, *iskati*, *mētati*, *kāsljati*, *klēpati*, *krēsati*, etc. (but *dōlagā*, *zāiskā*).

<sup>101</sup> Cf. also the examples mentioned by Daničić of old end-stress in the 2nd and 3rd person singular aorist in the verbs *lāžēm*, *ištēm*, *kāsljēm*, *mēcēm*, etc.

<sup>102</sup> Cf. Serbo-Croatian dial. *kōvēm* (literary S.-Cr. *kūjēm*).

<sup>103</sup> In most cases this end-stress seems, however, to be secondary, see p. 122.

<sup>104</sup> *li*, *pī*, *vī* may, however, also represent \**leit-*, \**peit-*, \**ueit-*.

<sup>105</sup> This form is found in Domostroj (Orlov's edition, p. 20).

<sup>106</sup> But we also have *nōsēcā*.

<sup>107</sup> The gerundial *i*-form must be the nom. sing. F. (or possibly a secondarily end-stressed nom. pl. M., as the mobility of these participles shows a tendency to be replaced by end-stress).

<sup>108</sup> In the perfect participle active *vedā*, *pěvā*, etc., would appear to have a neuter rather than a masculine form (cf. Gr. M. -*ός*, N -*ός*).

<sup>109</sup> Hraste. Južn. fil. 6, p. 202.

<sup>110</sup> This does not apply to verbs in -*ěti*, where the 2. 3. p. sing. aor. ended in \*-*ě*.

<sup>111</sup> The recessive stress in the present *émlю*, from and including the 1st person, shows that this present comes from Church Slavonic.

<sup>112</sup> Besides *třt*.

<sup>113</sup> Secondly words with recessive present stress are included in this category, cf. Čak. (Novi): *oglodānā*.

<sup>114</sup> Cf. in older Russian, e.g. Uč. i chitr. *данó*, *даны*. (Stang p. 69). Ulož. *данó*, *даны*, *отданé*, *отданó*, *отданы*, *разданó*, *разданы*, *проданы* but also *отданэ*, *отданá*, *отданы*, *нероздано*, etc.

<sup>115</sup> Apart of course from the prefix syllable.

<sup>116</sup> For the explanation of this accentuation, see p. 15f.

<sup>117</sup> Besides these forms *оумрети* (Kormčaja 1650 71a) also occurs in Old Russian.

<sup>118</sup> Should probably be read as *gīvā*, as stressed long *i* in the Enchiridion is written *ī*, *ij* with greater consistency than in the cases where length is shown in other vowels.

<sup>119</sup> It is possible that the imperative *imais* (ix), *imaiti* (ix) besides *immais* (ix), *immaiti* (ix) [Ench.] suggests suffix-stress in this form as in Russian *примі*, *приміте* besides *примеш*.

<sup>120</sup> Possibly under the influence of old verbs with fixed root-stress.

<sup>121</sup> See Jaunius, *Grammatika lit. jazyka*, Būga's translation, p. 203 f.

<sup>122</sup> In Prussian probably not from -*ās*, as \**deiwās* is represented in the texts by *deiwus*, never by \**deiwus*. The form *deiwus* (with rising tone?) probably arose from \**deiwās* when the -*a*- was dropped.

<sup>123</sup>  $\wedge = \sim$ .

<sup>124</sup> In NTS 18, p. 199, I quote additional examples of end-stressed reflexive present forms from the dialect of Zietela.

<sup>125</sup> Cf., however, *tetrunkiē* as against *teveřtie* according to Jaunius, Gram.

<sup>126</sup> Advance of the ictus occurs extensively in Polabian. Lehr-Splawinski, *Studja nad akcentem słowiańskim* p. 67 ff; Gr. Połabska p. 119 ff., maintains that the ictus has been moved forward to an originally unstressed short or circumflex vowel, but not to an acute. I find no proof of this. In the substantival declension the ictus should, according to this theory, be retained on the root-syllable in the nominative singular of root-stressed *ā*-stems and in the nominative and accusative plural of root-stressed neuters. The last-mentioned category is only sparsely represented. As far as the nominative singular of *ā*-stems is concerned we find root-stress occurring most frequently, but in many cases we find end-stress where proto-Slavonic had root-stress: *bobó*, *reibó*, *korvó*, etc. In the first person singular of the verbs, admittedly, we find root-stress, but we also find this in the other personal forms, and in all verbs, including those which must have had end-stress in the 1. pers. sing. from proto-Slavonic times: the type \**pišō*, etc. The material does not seem clear enough to justify the rule which has been formulated.

<sup>127</sup> These and the following examples have been taken from Vasiljev, Kamora, p. 88 ff.

<sup>128</sup> The conditions are the same as in Novi *pālac* : gen. *pālca*, Štok. *pālac* : *pālca*.

<sup>129</sup> Ivšić, Rad 196, p. 243.

<sup>130</sup> The difference in intonation here requires more detailed investigation.

<sup>131</sup> I cannot agree with Bulachovskij, *Сборн. стамей* 1947, p. 405, in regarding *веселье*, *ветерня* as having the stress originally on the first syllable.

<sup>132</sup> In Slavonic the 1. p. sing. probably had stress on the 1st syllable in the «end-stressed» type.

## SUPPLEMENTARY REMARKS

The Čakavian material marked «Novi» has been taken from Belić's article in the *Russkij filologičeskij vestnik* 14 (1910) p. 181 ff.

Except where otherwise stated the Slovene material has been taken from A. Breznik, *Slovenska slovnica za srednje šole* (1935) and M. Valjavec's articles in *Rad* (mainly *Rad* 132, p. 116 ff.) Occasional differences in the spelling of Slovene words are due to the fact that the two authors do not always use the same orthography.

My attention has been called to the fact that I have used both *ĭ* and *t'* to represent palatalised *t*. As there was no time to make the necessary changes before going to print, I should like to point out that *ĭ* and *t'* represent the same sound.

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## NOTES AND CORRIGENDA

- P. 5, l. 19: For «*ī*, *ī*, *ī*, *ī*, *āi*, *āu*, etc.» read «long diphthong.»
- » 12, l. 21: After «retraction» add «and it is probable that in Lithuanian ictus was retracted from -*ā*(s).»
- P. 12, l. 23 ff.: Delete from and including «Moreover many other words» up to and including the seventh line from the bottom.
- » 12, l. 6 from bottom: for «this» read «his.»
- » 15, l. 1 from bottom: for «Sinlavonic» read «in Slavonic.»
- » 16, l. 2: for p. 60 f. read p. 56 f.
- » 18, l. 10: for p. 66 f. read p. 62 f.
- » 20, l. 2 from bottom: for p. 17 read p. 13.
- » 23, l. 8 from bottom: for p. 14 read p. 10.
- » 23, l. 1 from bottom: for p. 22 read p. 18.
- » 25, l. 16: for p. 19 read p. 20.
- » 30, l. 8 f.: For «the locative and instrumental in Slovene» read «the instrumental plural in Slovene.»
- » 31, l. 25 ff.: For «and though I am unable to formulate a precise law, I consider that the question itself lies outside the scope of this work» read «though I am unable to formulate precise laws for all cases.»
- » 35, l. 14 from bottom: for p. 25 read p. 21.
- » 36, l. 25: for p. 39 read p. 35.
- » 43, l. 16 from bottom: for p. 19 ff. read p. 15 ff.
- » 43, l. 9 from bottom: for p. 32 read p. 28.
- » 44, l. 15: for p. 19 ff. read p. 15 ff.
- » 48, l. 19: for p. 41 ff. read p. 37 ff.
- » 51, l. 2: After «suffix» insert: Valjavec, Rad. 132, p. 156, gives the form *vīden* with *e* as opposed to the infinitive *vidēti*. This suggests that the perf. part. pass. of *vidēti* has been changed on the pattern of the perf. part. pass. in *-en-* of the *i*-stems (but with *d* for *j* as in *zapodēn*, etc.) If this is so the circumflex is due to analogy with the type *dēlan*. Cf. the same intonation in other words with a root-stressed *l*-participle: *ukrāden*, *snēden*, *klāden*, etc.
- » 51, l. 13: for p. 48 read p. 44.
- » 55. Addendum: Arumaa, Urslav. Gramm. I, pp. 200 ff., writes: «Es ist nicht möglich, für die Chronologie der obengenannten prosodischen Änderungen der urslavischen Vokale irgendeinen Zeitpunkt anzugeben. Auch die slavische Lehnwortkunde versagt uns in diesem Punkt ihre Hilfe aus dem einfachen Grunde, weil es in den ostseefinnischen und auch in den baltischen Sprachen keine slavischen Lehnwörter gibt, die in die urslavische Zeit zurückreichen. So

kann man z.B. lit. *grōmata* 'Brief', lett. *grāmata* 'Buch', estn. *raamat* 'Buch', fin. *raamattu* 'Bibel' aus r. *zpāmoma* für die Chronologie des *jagoda*-Gesetzes oder einen Fall wie lit. *zopāgas*, lett. *zābaks*, estn. *saabas* aus r. *canōz* 'Stiefel' für die Chronologie der Länge in einer unmittelbar vortonigen Silbe nicht verwerten. Schon der junge kulturhistorische Inhalt dieses Lehngutes verbietet uns, hier weitreichende Rückschlüsse zu ziehen.» — Even though of the loan-words involved not a single one may perhaps be derived from proto-Slavonic, in my opinion the correlation Balt. *ā* : Sl. *a*, Balt. *ī* : Sl. *i*, Balt. *a* : Sl. *o*, etc., still retains its validity, as even the more recent loan-words may very easily have been introduced at a time when the old Slav. quantity system still applied.

- P. 56, l. 16: This sentence should run: «Exceptions are a group of words in *-iā* (\**vōl'ā*, etc.), and the type \**rōčbka* < \**rōčbka*, which has a neo-acute root-vowel.»
- » 57, l. 5: for p. 28 read p. 24.
- » 58, l. 15 from the bottom: After «words in *-iā*» add: «and the type \**rōčbka*.»
- » 66, l. 2: For *ruñkā'sun* read *runkā'sun*.
- » 66, l. 7 from the bottom: For «in forms with disyllabic endings» read «in certain forms with disyllabic endings.»
- » 67, l. 4: for p. 68 read p. 64.
- » 70, l. 14 from bottom: for p. 42 read p. 38.
- » 76, l. 8: for p. 69 read p. 65.
- » 78, l. 23: for p. 21 read p. 17.
- » 80, l. 7: after *uāpoveic* (Chronogr.) insert: «colours.»
- » 85, l. 8: Add: «Cf. examples of this kind in the dative as well, p. 76 f.»
- » 98, l. 4: The Čakavian circumflex is probably analogical here: gen. pl. *brōd* is to gen. sing. *brōda* as *čās* is to *čāsa*; *čēl* to *čēla*, *čēlōn*, etc., as *rāl* to *rāla*, *rālōn*; *konōp* to *konōp* as *čās* to *čās*, etc.
- » 99, l. 14 from the bottom: For «confirms» read «seems to confirm.»
- » 101, l. 25: for Slov. *gōli* read Slov. *gōli*.
- » 109, l. 13 from the bottom: For «p. 106 f.» read «p. 102 f.»
- » 130, l. 9: For *sječī* read *sječī*.
- » 138, l. 25: For \**xvalē* read \**xvalē*.
- » 138, l. 30: For *dēpъcumъ* read *dēpъcumъ*.
- » 149, l. 12: For *pōznāt* read *pōznāt*.
- » 157, l. 6 from the bottom: For *nešaūka* read *nešaūkia*.
- » 159, l. 13–24: I am now inclined to believe that verbs of the type 3. p. \**kelīā* originally followed \**šaukiā* > *šaukia* by analogy, subsequently (though how is not clear) joining accent type 1. That *ia*-verbs with

- a short root-vowel must at one time to a large extent have belonged to type 2 as suggested both by the many Lett. verbs with «Dehnton» (*bārt, buřt, iřt*), and by a number of Lith. root-stressed verbal derivatives in *-imas* belonging to *īa*-verbs with a short root vowel.
- P.159, l. 7 from the bottom: With regard to *tāriqs* it must be borne in mind that in earlier times this verb had an infinitive in *-yti*.
- » 164, l. 8 from the bottom. For «endstressed forms» read «endstressed reflexive forms.»
- » 175, l. 25: For *θυγάτηρ* read *θυγάτηρ*.
- » 181, l. 9: For «acute < neo-acute» read «acute > neo-acute.»

### POSTSCRIPT

At the conclusion of this work it is a pleasurable duty for me to express my thanks to Mr. R. I. Christophersen, Lecturer in English at the University of Oslo, for undertaking the onerous task of translating my book into English, as well as to my friend and colleague Professor C. Hj. Borgstrøm for his kindness in reading the proofs. Finally I am deeply grateful to the Norwegian Research Council for Science and the Humanities (Norges almenntvitskapsfelag forskningsråd) for the grant made to cover printing expenses.

C. S.

### POSTSCRIPT TO THE SECOND EDITION

As I can see no reason for making any essential alterations to the text as published in the first edition (1957) of this book, it has been possible to issue it anew photographically, with a few additional notes and corrigenda. This has of course made it impossible to include any critical appraisal of such publications as have been issued subsequent to 1957. In this connection I am thinking first and foremost of *Linda Sadnik*, *Slavische Akzentuation I*, *Vorhistorische Zeit* (1959); *V. Kiparsky*, *Der Wortakzent der russischen Schriftsprache* (1962); *P. Arumaa*, *Urslavische Grammatik I* (1964); *J. Kurylowicz*, *L'Accentuation des langues indo-européennes*<sup>2</sup> (1958). With regard to *Dybo's* and *Illič-Svityč's* ideas, some of them highly radical (cf. V. M. Illič-Svityč, *Именная акцентуация в балтийском и славянском*, 1963), especially the possibility of original identity between accent types *a* and *b*, it is my intention to return to this problem in another work, not least since the ideas propounded by the authors apply to an earlier proto-Slavonic period than the last proto-Slavonic stage, which I have endeavoured to reconstruct.

C. S.

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